HITACHI

SERVICE MANUAL
MANUEL DE SERVICE

NTSC | MICLXU CHASSIS

PA	No. 0027

31GX31B/CY35
31KX39K/CY33
31DX21B/CY33
31DX11B/CY31

R/C: CLU-851GR
CLU-692GR
CLU-681GJ

ATTENTION: Avant de mettre ce chassis en service, if est important que ie technicien lise les "Mesures de sécurité" et "Avis concernant l´appareil" contenus dans ie MANUAL DE SERVICE.

CAUTION: Before servicing this chassis, it is important that the service technician read the "Safety Precaution" and "Product Safety Notices" in this Service Manual.

Ce téléviseur est capable de recevoir les programme sous titrés (CC ou ☐).

This television receiver will display television closed captioning (CC or ☐) in accordance with paragraph 15.119 of the FCC rules.

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Caractéristiques techniques et composants sont sujets à modification pour amélioration.
SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

TELEVISIÓN COULEUR / COLOR TELEVISION

AUGUST / AQUT 1993 **HHEA - MANUFACTURING DIVISION**

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely th safety and reliability of the product and may void the warranty If you are not qualified to perform the repair of this product and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health and Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

SAFETY NOTICE
USE ISOLATION TRANSFORMER WHEN SERVING

Components having special safety characteristics are identified by ⚠ on the parts list in this Service Data and its supplements and bulletins. Before servicing this, it is important that the service technician read and follow the "Safety Precautions" and the "Product Safety Notices" in this Service Manual.

•For continued x-radiation protection, replace picture tube with original type or Hitachi equivalent type.

Ce Manuel de service fût concu afin d´ étre utiliser par des techniciens qualifiérs et non pas des bricoleurs. Les techniciens qualifiés possédent l´ équipment et l´ outillage appropries et fûrent professionnellement formés à effecteur des réparations complexes sur les produits couvert par le présent manuel. Les réparations mal effectuées peuvent affecter la sécurité et l´ intégrité du produit et ainsi annulé la guarantie. Si vous n´étes pas qualifié afin d´ effectuer les réparations d´une facon professionnelle et sécuritaire veuillez vous réferrez à un techicien qualifié.

AVERTISSEMENT

Le plomb utilisé dans la soudure de ce produit est reconnu par l'agence de Santé et Bien-^´tre de la Californie comme produit toxique pouvant causer des malformations à la naissance ou autre domages physiques connexes (Code de Santé et Sécurité de la Californie (Section 25249.5). Eviter tout contact avec la peau lors de l'entretien ou la manutention des circuits ou autres componsantes pouvant contenir du plomb. Ne pas inhaler les vapeurs ou fumées de soudures.

NOTICE DE SÉCURITÉ
SE SERVIR D'UN TRANSFORMATEUR DE SEPARATION
POUR EFFECTEUR LES DÉPANNAGES

Les composants qui possèdent des caratériestiques de sécurité speciales soni indentifiés par un ombrage sur les schémas de montage t par un symbole ⚠ dans la liste des piéces constitutives du present manuel de données de dépannage dans son supplément et les bulletins.

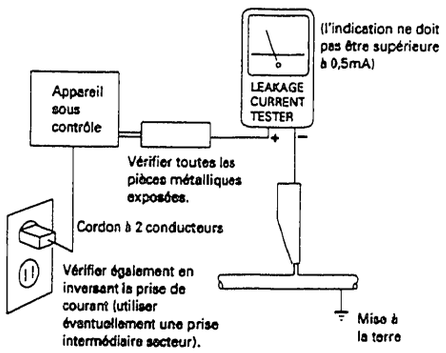
•Les tube-image doit être remplacé par un modéle d'origine ou par un tube-image dont la marque est recommandée par HITACHI de facon à avoir la certitude qu une protection contre le rayonnement des X est assurée.

INSTRUCTIONS DE SECURITE
ADVERTISSEMENT: Etant donné que le chassis de ce récepteur de télévision est connecté au sectuer en cours de fontionnement, acune réparation ne doit être engagée par quiconque ne connaissant pas les masures de sécurité indispensables pour effectuer des travaux sur ce type de matérial. Les précautions suivantes dolvent être observées:

1. Ne pas installer ni deposer ou manipuler le tube image sans raison sans porter de lunettes de protection contre les éclats. Toute personne non équippée de la sorte doit se tenir éloignée des tubes images au moment de ieur manipulation.
2. Quand une réparation doit être falte, un transformateur d'isolation doit être placé entre le sectuer électrique et la récepteur de télévision; ceci est indispensable avant de procéder à toute réparation sur un chassis an état de marche.
3. Quand la plaque de montage d'un téléviseur doit être changée, les dispositifs de protection tels que: les dispositifs d'arrêt, les boutons non métalliques, le couvercie du coffret ou les écrans de protection, les condensateurs et résistances d'isolation etc. doivent être ramis en place.
4. Quand une réparation doit être faite, respecter la disposition d'origine des fils. Une attention spéciale est requise en ce qui concerne le passage des fils dans l'étage à haute tension.
5. Employer toujours les composants de remplacement du fabricant, notamment les composants critiques qui sont ombragés sur le schéma de montage ne dolvent, en aucun cas, être remplacés par ceux d'un autre fabricant. En outre, quand un court-circuit a'est produit, remplacer les composants qui donnent des des signes de surchauffe évidente.
6. Avant de remettre un téléviseur réparé au client, le technicien en charge doit procéder à des essais complets du téléviseur pour être certain que son fontíonnement est mormal et qu'il ne présente aucun risque de danger ou de décharge électrique; il doit aussi e'assurer que les dispositifs de protection incorporés dans le téléviseur n'ont pas subi de modification au cours des réparations. Par conséquent, les vérifications suivantes doivent être faites pour assurer une protection compléte aux clients comme aux réparateurs.

Vérification complète de fuite de courant au repos.
Après avoir débranché la prise du cordon de la prise de sortie secteur de 120V 60Hz, court-circuiter les deus tiges de la prise. Règler l'interrupteur général sur marche. Utiliser un controleur d'isolement (500VC.C); brancher l'un des fils à la prise couplée, puis avec l'autre, toucher une partie métallique de l'apparell (antennes, têtes de vis, piéces métalliques exposées possédant notamment une voie de retour au châssis). Les piéces métalliques exposées possédant une voie de retour au chassis doivent posséder une résistance minimale de 0.24M ohms et un résistance maximale de 5.2M ohms. Toute résistance inférieure à ces donnés indiquent une anomalie et ceci implique des mesures de correction. Les piéces métalliques exposées ne possédant pas de voie de retour au chassis indiqueront qu'il existe un circuit ouvert.

Vérification de fuite de courant aous tension.
Raccorder le prise du cordon dans une prise de sortie secteur de 120V 60Hz (ne pas utiliser de transformateur d'isolation pour effectuer cette vérification. Régler l'interrupteur général sur marche. Utiliser un vérificateur de fuite de couranct (Simpson modèls 229 ou l'équivalent) et mesurer le courant qui provient des parties métalliques exposées du coffret de l'appareit (antennes, têtes de vis, revêtemente métalliques axe de commande, etc), les pieces métalliques exposées possédant notamment une voie de retour au chassis, à toute source de mise à la terre (conduite, tuyau de secteur, etc.. Le courant relevé ne doit pas dépasser 0.5mA.


(l'indication ne doit pas être supérieure à 0,5mA)
Appareil sous contrôle
LEAKAGE CURRENT TESTER
Vérifier toutes les pièces métalliques exposées.
Cordon à 2 conducteurs
Vérifier également en inversant la prise de courant (utiliser éventuellement une prise intermédiaire secteur).
Mise à la terre

Vérification de fuite de courant secteur

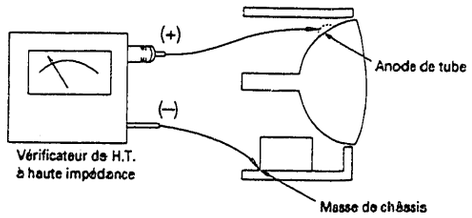
TOUT RELEVE NE CORRESPONDANT PAS AUX TOLERANCES SPECIFIÉES PLUS HAUT INDIQUENT UN RISQUE DE CHOC ELECTRIQUE ET LES REPARATIONS NECESSAIRES DOIVENT ETRE FAITES AVANT DE RENDRE LE TÉLÉVISEUR AU CLIENT.

Haute tension
Ce télévision est équippé d'un circuit de protection de nature à fournir une indication pécise d'une augmentation de tension en comparaison de la valeur prédéterminée. Faire en sorte d'être conforme avec toutes les remarques de ce manuel de réparation concernant le circuit de protection au moment d'effectuer les réparations de telle sorte que ce circuit

soit maintenu en parfait état de fonctionnement.

Avertissement au réparateur.

Quand le niveau de noir et la brillance de limage sont minimum la haute tension de ce téléviseur est inférieur à **34.0 kV**. Si vous remplacez des composants dans les circuits d'horizontal et de haute tension, s'assurer que la haute tension est de **34.0 kV** quand le niveau de noir et la brillance de l'image est au minimum.
Le relevé de HT se fait à l'aide d'un vérificateur de H.T. à haute impédance. Raccorder le pôlenégatif (-) à la mase du chassis et le pôle positif (+) à l'anode du tube. (S'en tenir aux branchements spécifiés sur le schéma qui suit.) Note: Débrancher ie cordon d'alimentation de la prise murale avant de raccorder l'anode de la lampe écran.



Radiation de Rayons X
TUBE-IMAGE: La source primaire de radiation des rayons X de ce téléviseur est tout d'abord ie tube-image. Le tube-image qui est employé pour la fonctionnement ci-dessus spécifié pour cette plaque de montage est d'une construction spéciale de nature à limiter les radiations de rayons X. Pour assurer une protection continue contre les radiatonde rayons X, le tube-image de remplacement doit être identique au modéle d'origine et d'un type approuvé par HITACHI.

Au cours de la recherche de panne et des essais du téléviseur présentant un problèma de haute tension, éviter d'être trop près du tube-image et des composants à haute tension. Ne pas mettre le chassis sous une tension plus élevée que nécessaire pour localiser la panne ou l'excès de haute tension.

NOTICE DE SECURITE DE FABRICATION

De Nobreux éléments électriques et mécaniques incorporés dans les téléviseurs HITACHI possédent des caractéristiques evidentes de sécurité. Ces caractéristiques ne sont pas toujours évidentes par contrôle visuel et la protection assuré par ces éléments n'est pas forcément obtenue en utilisat des éléments de remplacement destinés pour une tension, un wattage supérieur, etc.

Les éléments de remplacement qui possèdent des caractéristiques de sécurité spéciales sont identifiés dans ce manuel de réparation.

Les composants électriques qui possèdent ces caractéristiques sont identifiés par le symbole ⚠ sur les schémas de montage et dans le catalogue de piéces de rechange de ce manuel de réparation. L'emploi de composants de remplacement ne possèdant pas les mèmes caratéristiques de sécurité que les composants de remplacement recommandés par HITACHI indiqués dans le catalogue de piéces de rechange de ce manuel de réparation peuvent être à l'origine de décharge électrique, d'incendie, de radiation de rayons X ou présenter d'autres dangers.

Une production de fabrication est continuellement assurée par l'édition d'instructions nouvelles et reviéesqui sont fournies de temps en temps. Pour connaitre les renseignements les plus récent consultez toujours le manuel de réparation HITACHI le plus récent. Une demande de manuel de réparation HITACHI ou de supplémente peut être faite auprés de Une demande de manuel de réparation HITACHI SALES CORPORATION pour une charge nominale.

ATTENTION

Le symbole suivant placé près du fusible d'alimentation correspond au fusible à fusion rapide qui doit être remplacé.
La puissance du fusible est indiquée dans le symbole.

Exemple:

125V	
5A	

F901

La puissance du fusible F901 est de 5.0A-125V.
Remplacer le fusible avec un fusible de même puissance pour qu'une protection permanante contra l'incendie soit assurée.

SPECIFICATIONS TECHNIQUES

Impédance d'entrée d'antenne:	75Ω (300Ω)
Canaux couverts:	
VHF BAND:	2 à 13
UHF BAND:	14 à 69
CATV MID BAND:	A-5 à A-1
	A à I
CATV SUPER BAND:	J - W
CATV HYPER BAND:	W+1 à W+28
CATV ULTRA BAND:	W+29 à W+84
Canaux de réception:	181canaux
Indicateur de canal:	Sur l'écran / forme numérique
Fréquences Intermédaires:	
Porteuse de fréquence intermédiaire image:	45.75MHz
Porteuses de fréquence intermédiaire son:	41.25 MHz
Fréquence intermédiaire son:	4.50MHz

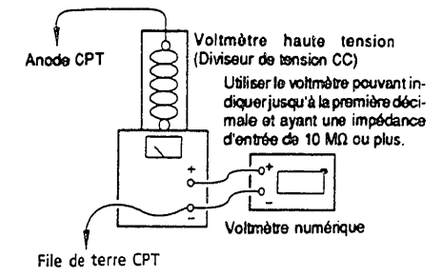
Entrée allimentation:	Secteur altern. 120V, 60Hz
Consomation	
31GX31B:	180W
31DX21B & 31KX39K:	155W
31DX11B:	155W
Convergence:	Auto Convergence
Focalisation:	Electrostatique
Tube cathodlque:	
31GX31B/CY35:	A79AFX15X01
31DX21B & 31KX39K/CY33:	M78JUA29X01
	A79AEJ10X01
31DX11B/CY31:	M78JUA29X01
Haut-parleur:	2 haut-parleurs (60 x 120mm)
Sortie son:	3W x 2

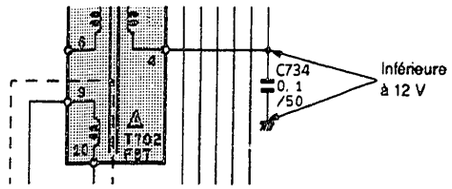
PRECAUTIONS TECHNIQUES

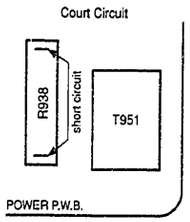
Vérification du circuit limiteur haute tention

1. Connector le voltmétre haute tention entre l'anode CPT (capuchon d'anode) et la terre (TP702) de la manière indiquée dans la diagramme.
2. Régler la rention d'entrée CA à 120 ± 3V.
3. Capter le signal d'émission et régler les résistances variables d'écran et de sous-intensité pour que l'intensité du faisceau soit de 1.50 ± 0.1 mA. (À ce moment, la tension à la borne ABL de FBT - entre les deux extrémités de C734-doit être de 12 V ou moins.)
4. Vérifier qu'à ce moment la haute tension constante soit de 28.0kV (31KX39K, 31DX21B, 31DX11B) et 29.5kV pour 31GX31B.
5. Régler la tension d'entrée CA à 100 ± 5V, puis court-circuiter les deux extrémitiés de R906.
6. Laisser les réglages des résistances variables d'écran niveau du noir et d'image comme dans l'article (3) et augmenter progressivement la tension d'entrée CA. Vérifier que l'image disparaît lorsque la haute tension est de 31.6kV ± 1.2kV (31KX39K, 31DX21B, 31DX11B) et 33.1kV ± 1.2kV for 31GX31B.
7. Immédiatement après avoir vérifié que l'image disparaft, mettre l'interrupteur d'alimentation du récepteur sur la position "OFF".

IC901


Anode CPT
Voltmètre haute tension
(Diviseur de tension CC)
Utiliser le voltmètre pouvant indiquer jusqu'à la première décimale et ayant une impédance d'entrée de 10 MΩ ou plus.
Voltmètre numérique
File de terre CPT





SAFETY PRECAUTIONS

NOTICE: Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis or picture tube.

WARNING: Since the chassis of this receiver is connected to one side of the AC power supply during operation, whenever the receiver is plugged in, service should not be attempted by anyone unfamiliar with the precautions necessary when working on this type of receiver.

The following precautions should be observed:

1. Do not install, remove, or handle the picture tube in any manner unless shatterproof goggles are worn. People not so equipped should be kept away from the body while handling.
2. When service is required, an isolation transformer should be inserted between power line and the receiver before any service is performed on a "HOT" chassis receiver.
3. When replacing a chassis in the receiver, all the protective devices must be put back in place, such as barriers, non-metallic knobs, adjustment and compartment cover-shields, isolation resistors-capacitors, etc.
4. When service is required, observe the original lead dress in the high voltage circuitry area.
5. Always use the manufacturer's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacturer's. Furthermore, where a short circuit has occurred, replace those components that indicate evidence of overheating.
6. Before returning a serviced receiver to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the receiver by the manufacturer has become defective, or inadvertently defeated during servicing.

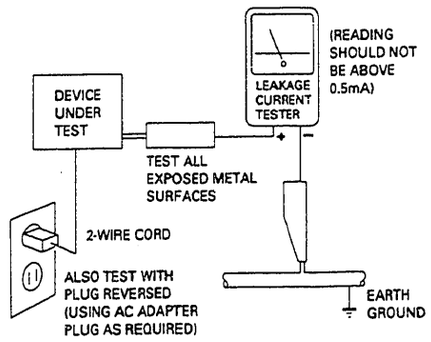
Therefore, the following checks should be performed for the continued protection of the customer and service technician.

Leakage Current Cold Check

With the AC plug removed from the 120V AC 60Hz source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (antennas, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis should have a minimum resistor reading of 0.24M Ω and a maximum resistor reading of 12M Ω. Any resistance value below or above this range indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

Leakage Current Hot Check

Plug the AC line cord directly into an AC 120V 60Hz outlet (do not use an isolation transformer for this check). Turn the AC power switch on. Using a "leakage Current Tester (Simpson Model 229 or equivalent)", measure for current from all exposed metal parts of the cabinet (antennas, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 0.5mA.


(READING SHOULD NOT BE ABOVE 0.5mA)
LEAKAGE CURRENT TESTER
DEVICE UNDER TEST
TEST ALL EXPOSED METAL SURFACES
2-WIRE CORD
ALSO TEST WITH PLUG REVERSED (USING AC ADAPTER PLUG AS REQUIRED)
EARTH GROUND

AC Leakage Test

AC LEAKAGE TEST

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE RECEIVER TO THE CUSTOMER.

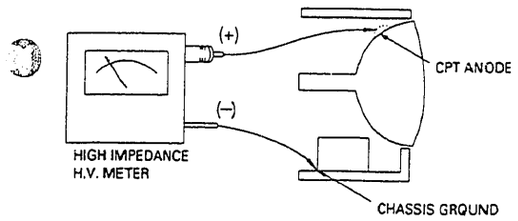
High Voltage

This receiver is provided with a hold down circuit for clearly indicating that voltage has increased in excess of a predetermined value. Comply with all notes described in this Service Manual regarding this hold down circuit when servicing, so that this hold down circuit is operated correctly.

Serviceman Warning

With minimum Black Level and Picture, the operating high voltage in this receiver is lower than 34.0kV. In case any component having influence on the high voltage is replaced, confirm that high voltage with minimum Black Level and Picture is lower that 34.0kV. To measure H.V. use a high impedance H.V. meter. Connect (-) to chassis earth and (+) to the CPT anode button (See the following connection diagram).

NOTE: Turn the power switch off without fail before the connection to the Anode button is made.



X-Radiation

TUBE: The primary source of X radiation in this receiver is the picture tube. The tube utilized in this chassis is specially constructed to limit X radiation emission.

For continued X radiation protection, the replacement tube must be the same type as the original, HITACHI approved type.

When troubleshooting and making test measurements in a receiver with an excessive high voltage problem, avoid coming unnecessarily close to the picture tube and the high voltage component.

Do not operate the chassis longer than is necessary to locate the cause of the excessive voltage.

PRODUCT SAFETY NOTICE

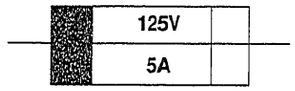
Many electrical and mechanical parts in HITACHI television receivers have special safety related characteristics. These are often not evident from visual inspection not can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacements parts which have these special safety characteristics are identified in this Service Manual. Electrical components having such features are identified with an ⚠ mark in the schematics and parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the HITACHI recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, X-radiation, or other hazards,

Production Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current HITACHI Service Manual. A subscription to, or additional copies of HITACHI Service Manual may be obtained at a nominal charge from HITACHI SALES CORPORATION.

CAUTION

The following symbol near the fuse indicates fast operating fuse to be replaced. Fuse ratings appear within the symbol. Example:



F901

The rating of fuse F901 is 5.0A-125V.
Replace with the same type fuse for continued protection against fire.

POWER SOURCE

This television receiver is designed to operate on 120 volts/60Hz, AC house current. Insert the power cord into a 120 volts/60 Hz outlet.

NEVER CONNECT THE TV TO OTHER THAN THE SPECIFIED VOLTAGE OR TO DIRECT CURRENT.

Use of this TV set in 50 Hz areas will not harm the TV set. It will only cause the time which appears on the screen to be delayed when used in a 50 Hz area. Consult service personnel if you move to an area where the power supply frequency is 50 Hz.

TECHNICAL SPECIFICATIONS

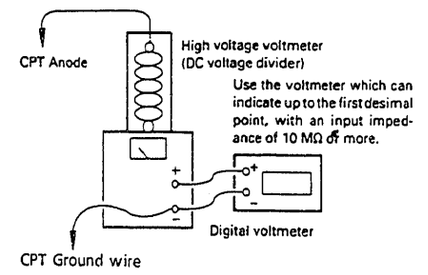
ANTENNA INPUT IMPEDANCE..... 75Ω (300Ω)
CHANNEL COVERAGE
VHF BAND..... 2 - 13
UHF BAND ..... 14 - 69
CATV MID BAND ..... A-5 - A-1
A -1
SUPER BAND ..... J - W
HYPER BAND ..... W+1 - W+28
ULTRA BAND .....W+29 - W+89
RECEIVING CHANNEL 181ch
CHANNEL INDICATOR .....DIGITAL/ON SCREEN
INTERMEDIATE FREQUENCY
Picture 1-F Carrier 45.75MHz
Sound 1-F Carrier ..... 41.25 MHz
Sound 1-F 4.50MHz

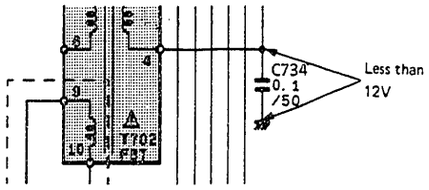
POWER INPUT AC120V, 60Hz
POWER RATINGS
31GX31B 180W
31DX21B & 31KX39K 155W
31DX11B 155W
CONVERGENCE .....Self Convergence
FOCUS ..... Electrostatic
PICTURE TUBE
31GX31B/CY35 ..... A79AFX15X01
31DX21B &31KX39K/CY33 ... M78JUA29XC
A79AEJ10X0
31DX11B/CY31 ..... M78JUA29X01
SPEAKER ..... 2 Speakers
SOUND OUTPUT ..... 3W x 2

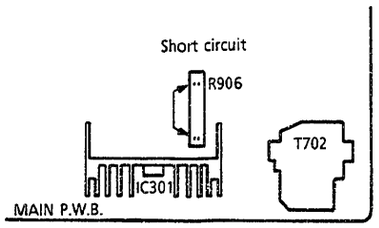
TECHNICAL CAUTIONS

High voltage limiter circuit operation check

1. Connect the high voltage voltmeter between the CPT anode terminal (anode cap) and ground as shown in the diagram.
2. Set the AC input voltage to 120 ± 3V.
3. Receive the broadcast signal and set the picture level and the black level to maximum. Adjust the screen VR and sub brightness VR so that beam current is 1.50 ± 0.1mA. (The voltage at ABL terminal of FBT - between both ends of C734 - should be 12V or less at this time.)
4. Check that the constant high voltage is 28.0 kV for 31KX39K, 31DX21B, 31DX11B and 29.5 kV for 31GX31B at this time.
5. Set the AC input voltage to 100 ± 5V and then short circuit both ends of R906.
6. Leave the setting of the picture, black level and screen VRs as in item (3) and gradually increase the AC input voltage. Check that the picture disappears when the high voltage is 31.6kV ± 1.2kV for 31KX39K, 31DX21B, 31DX11B and 33.1kV ± 1.2kV for31GX31B.
7. Turn the switch of the set off immediately after checking that the picture disappears.


CPT Anode
High voltage voltmeter
(DC voltage divider)
Use the voltmeter which can indicate up to the first desimal point, with an input impedance of 10 MΩ or more.
Digital voltmeter
CPT Ground wire



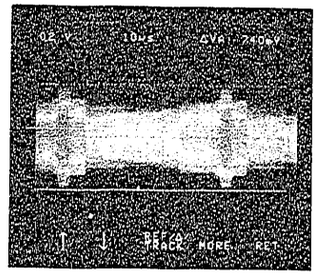


FORME D´ONDE DE CHAQUE ÉTAGE / WAVEFORMS AT EACH SECTION

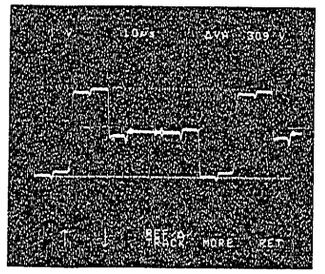
Les nombres qui sont indiqués entre parenthèses correspondent aux emplacements qui sont représentés sur schéma de câblage.

Numbers inside ◯ correspond to locations shown in the circuit diagram.

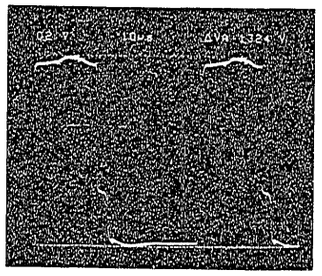
(1) U101 pin 7



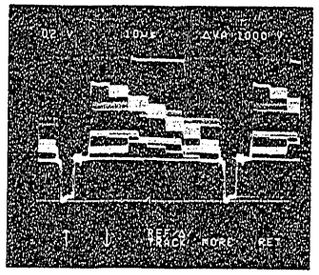
(5) IC 201 pin 18



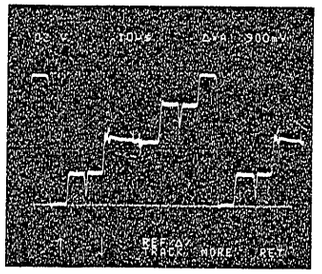
(9) IC201 pin 23



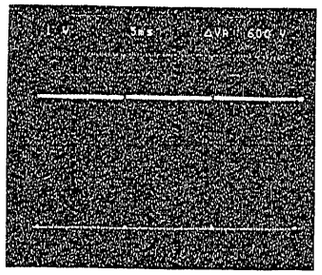
(2) IC201 pin 38



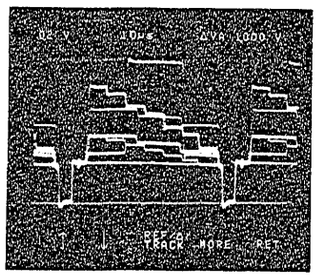
(6) IC201 pin 19



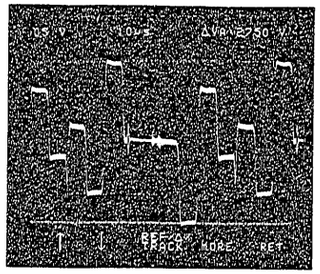
(10) IC201 pin 28



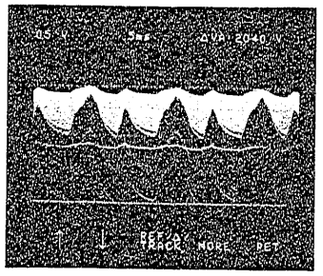
(3) Q3106 emitter



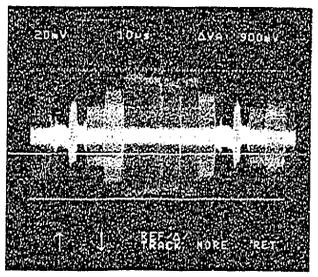
(7) IC201 pin 20



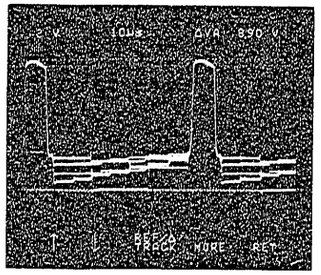
(11) IC651 pin 6



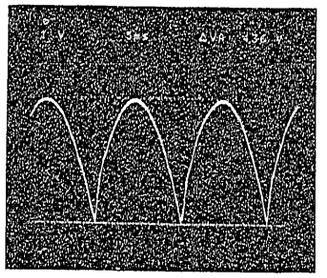
(4) Q3107 emitter



(8) IC201 pin 21



(12) Between R669 and R651

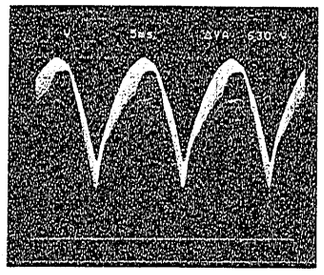


FORME D´ONDE DE CHAQUE ÉTAGE / WAVEFORMS AT EACH SECTION

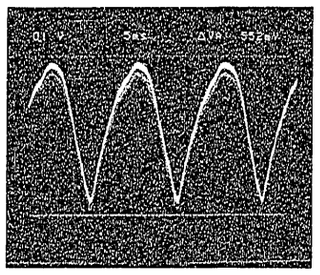
Les nombres qui sont indiqués entre parenthèses correspondent aux emplacements qui sont représentés sur schéma de câblage.

Numbers inside ◯ correspond to locations shown in the circuit diagram.

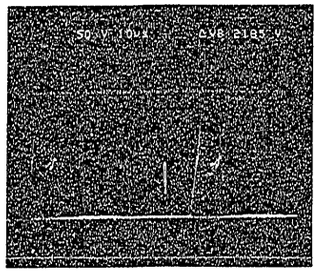
(13) Q651 emitter



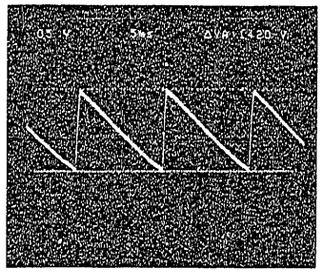
(17) Q750 base



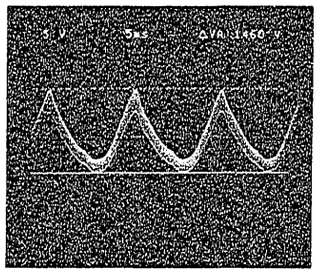
(21) Between C726 and L711



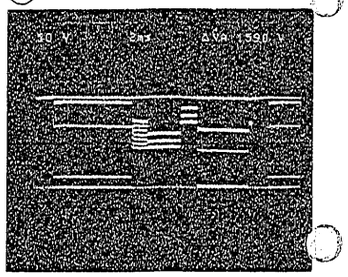
(14) Between R650 and R627



(18) Q752 collector

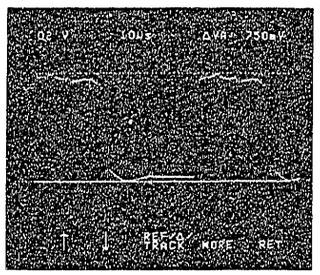


(22) Q854 collector

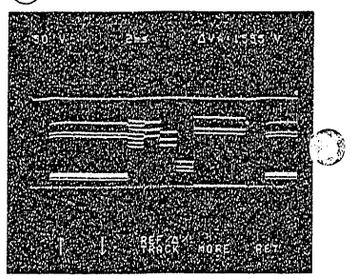


(15) IC625 pin 2

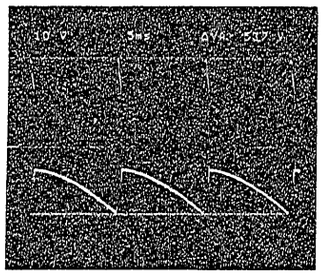
(19) Q710 base



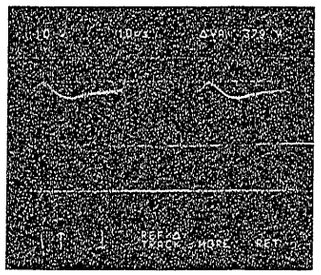
(23) Q855 collector



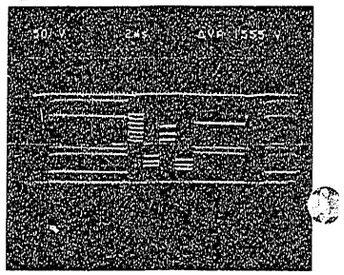
(16) IC625 pin 12



(20) Q710 collector



(24) Q856 collector



DC VOLTAGE TABLES

CIRCUIT NO.	PIN NO.	VOLTAGE (V DC)
IC0101	1	5
	2	5
	3	5
	4	5
	5	0
	6	0
	7	0
	8	0
	9	5
	11	2.3
	12	2.5
	13	5
	14	5
	15	5
	16	5
	17	2.8
	18	5
	19	5
	20	5
	21	0
	22	0
	23	0
	24	0
	25	4.35
	26	5
	27	2.5
	28	0
	29	0
	31	7
	32	3.5
	33	2.3
	34	5
	35	3.6
	36	1.5
	37	5
	38	5
	39	0
	40	5
	41	0.7
	42	0.1
	43	2.5
	44	5
	45	5
	46	5
	47	0.35
	48	0
	49	0
	50	0.18
	51	5
	52	5
IC0102	1	5
	2	5
	3	0
	4	5

CIRCUIT NO.	PIN NO.	VOLTAGE (V DC)
IC0102	5	5
	6	5
	7	5
	8	5
IC0103	1	0.35
	2	5
	3	0
	4	5
	5	0
	6	0
	7	7.5
	8	0
	9	0
	10	0
	11	0
	12	3.78
	14	0
	15	3.6
	16	4.5
	17	0
	18	5
IC0104	1	0.8
	2	1
	3	0
	4	0
	5	0
	6	2.3
	7	2.1
	8	4.2
	9	4.6
	10	4.1
	11	3.7
	12	3.5
	13	2.9
	14	3.5
	15	3.3
	16	5.2
	17	2.8
	18	2.9
	19	2.6
	20	1.3
	21	0.7
	22	0
IC201	1	5
	2	6.9
	3	5.6
	4	5.7
	5	4.3
	6	4
	7	0
	8	4.5
	9	4.6
	10	4.8
	11	8.7

IC201	12	5.6
	13	5.2
	14	8.7
	15	0
	16	0
	17	0
	18	5
	19	5
	20	5
	21	4.1
	22	0.1
	23	0.6
	24	0
	25	5.3
	26	5.6
	27	7.7
	28	4.4
	29	6.8
	30	7.9
	31	4.2
	32	2.7
	33	5.7
	34	4.2
	35	4
	36	4.3
	37	0
	38	3.4
	39	7
	40	4.7
	41	3.8
	42	4.7
	43	8.3
	44	3.2
	45	3.1
	46	3
	47	5.2
	48	0
	49	3.3
	50	7.8
	51	7.8
	52	4.9
IC3001	1	0
	2	8.9
	3	4.3
	4	0
	5	5
	6	0.2
	7	5
	8	0.1
IC3002	1	2.7
	2	5.3
	3	2.6
	4	0.4
	5	1.9
	6	1.9
	7	0.4

CIRCUIT NO.	PIN NO.	VOLTAGE (V DC)
IC3002	8	2.6
	9	0.1
	10	2.7
IC401	1	1.3
	2	1.3
	3	4.6
	4	4.5
	5	4.5
	6	0
	7	4.6
	8	3.5
	9	0.1
	10	4.3
	11	4.5
	12	4.5
	13	1.3
	14	4.6
	15	0.4
	16	4.6
	17	0.8
	18	7.3
	19	4.6
	20	7.3
	21	4.7
	22	0
	23	6.4
	24	0
	25	0
	26	7.6
	27	4.5
	28	4.6
	29	3.2
	30	3
	31	0.1
	32	8.7
	33	0.1
	34	4.1
	35	4.4
	36	0.7
	37	3.9
	38	3.9
	39	4.5
	40	3.8
	41	1.8
	42	4.5
IC402	1	4.4
	2	4.3
	3	4.3
	4	4.3
	5	8.7
	6	8.7
	7	0

DC VOLTAGE TABLES

CIRCUIT NO.	PIN NO.	VOLTAGE (V DC)
IC402	11	4.4
	12	0.3
	13	0.3
	14	8.7
IC471	1	1.3
	2	0.1
	3	17.6
	4	0
	5	0.1
	6	1.3
	7	7.9
	8	16.8
	9	0
	10	17.8
	11	14.8
	12	9
IC625	1	8.1
	2	4.4
	3	4.1
	4	4.1
	5	0
	6	4
	7	3.9
	8	25.9
	9	2.4
	10	1.4
	11	0
	12	13.6
	13	26.5
IC651	1	5.1
	2	5.1
	3	5.1
	4	0
	5	5.7
	6	5.7
	7	6.1
	8	10.7
IC701	1	10.7
	2	9.5
	3	0
	4	3.9
	5	32.8
	6	4
IC702	1	0
	2	0
	3	0
	4	15.8
IC901	1	0
	2	130.5
	3	160
	4	130.5
	5	0

CIRCUIT NO.	PIN NO.	VOLTAGE (V DC)
Q0101	B	0
	C	5.1
	E	0
Q0102	B	4.5
	C	5.1
	E	5.1
Q0105	B	0.7
	C	0.1
	E	0
Q0106	B	0
	C	4.4
	E	0
Q0107	B	0
	C	4.9
	E	0
Q0108	B	2.3
	C	5.1
	E	1.6
Q0109	B	0.8
	C	0.1
	E	0
Q0110	B	0.6
	C	2.5
	E	0.3
Q0111	B	0.3
	C	2.5
	E	0.3
Q101	B	2.3
	C	7.2
	E	1.6
Q201	B	3.2
	C	0
	E	3.9
Q202	B	2.1
	C	8.8
	E	1.5
Q241	B	2.9
	C	8.8
	E	2.3
Q301	B	9
	C	9
	E	8.3
Q302	B	4
	C	0
	E	3.8
Q303	B	4.6
	C	3.8
	E	3.8
Q3101	B	5.1
	C	0
	E	5.7
Q3102	B	4.1
	C	7.1
	E	3.5
Q3103	B	3
	C	6.6
	E	2.3
Q3104	B	2.3
	C	6.1
	E	1.6
Q3105	B	3.4
	C	8.3
	E	2.8
Q3106	B	6.1
	C	8.9
	E	5.4
Q3107	B	3.5
	C	0
	E	4.1
Q3108	B	4.4
	C	8.9
	E	3.7
Q3109	B	0.8
	C	0
	E	0

CIRCUIT NO.	PIN NO.	VOLTAGE (V DC)
Q3110	B	6.2
	C	0.7
	E	6.8
Q3111	B	0.7
	C	5.3
	E	0
Q3112	B	1.1
	C	8.8
	E	0.5
Q3113	B	8.3
	C	5
	E	8.9
Q3114	B	5.3
	C	8.8
	E	4.6
Q3115	B	0
	C	0
	E	0
Q401	B	0.2
	C	8.8
	E	0
Q402	B	1.2
	C	2.1
	E	0.5
Q403	B	2.7
	C	6.4
	E	2.1
Q404	B	2.7
	C	6.4
	E	2.1
Q405	B	6.4
	C	8.7
	E	5.7
Q406	B	6.4
	C	8.8
	E	5.7
Q407	B	1.8
	C	8.1
	E	1.2
Q408	B	8.1
	C	5.8
	E	8.7
Q409	B	1.8
	C	8.1
	E	1.2
Q410	B	8.1
	C	5.7
	E	8.7
Q411	B	0
	C	0
	E	0
Q412	B	0
	C	0
	E	0
Q471	B	0
	C	17.6
	E	0
Q551	B	0.7
	C	0.1
	E	0
Q601	B	5.1
	C	8.8
	E	4.4
Q602	B	0.6
	C	4.1
	E	0
Q651	B	601
	C	9.6
	E	5.3
Q706	B	9.6
	C	17.7
	E	9
Q710	B	.04
	C	19.4
	E	0

CIRCUIT NO.	PIN NO.	VOLTAGE (V DC)
Q711	B	-58.8
	C	35.1
	E	-58.8
Q712	B	0
	C	17.7
	E	0
Q741	B	6.4
	C	7.3
	E	5.7
Q750	B	-57.9
	C	-49
	E	-58.3
Q751	B	-41.8
	C	-58.3
	E	-41.7
Q752	B	-58.3
	C	-45.5
	E	-58.8
Q851	B	5.1
	C	7.8
	E	4.4
Q852	B	5.2
	C	7.8
	E	4.5
Q853	B	5.3
	C	7.8
	E	4.6
Q854	B	8.9
	C	150.4
	E	8.3
Q855	B	8.9
	C	146
	E	8.3
Q856	B	8.9
	C	146.9
	E	8.3
Q863	B	1.4
	C	4.4
	E	3.8
Q864	B	3.2
	C	3.9
	E	3.9
Q904	B	13.1
	C	17.7
	E	12.5
Q906	B	17.7
	C	0
	E	17.9
Q921	B	-59.3
	C	35
	E	-59.5
Q951	B	0
	C	15.2
	E	8.8
Q952	B	5.8
	C	15.2
	E	5.2
Q953	B	36.9
	C	22.3
	E	38
Q954	B	0
	C	36.9
	E	0
Q981	B	41.9
	C	55.6
	E	35.5
Q982	B	57.7
	C	57.7
	E	58.4

NOTICE DE SÉCURITÉ DE FABRICATION: Les composants qui sont accompagnés du symbole ⚠ et indiqués par une zone de couleur, possèdent des caractéristiques spéciales qui ont traits à la sécurité. Avant de procéder au remplacement de l'un de ces composants, lire attentivement la notice de sécurité de fabrication contenue dans ce manuel de réparation. Ne pas altérer le niveau de sécurité de l'appreil en procédant à des réparations erronées.

DIAGRAMME DE CIRCU

• Etant donné que ceci représente un diagramme schématique de base, la valeur des éléments est sujette à modicicaiton pour des raisons d' amélioration.

CUIT DE BASE / BASIC CIRCUIT DIAGRAM

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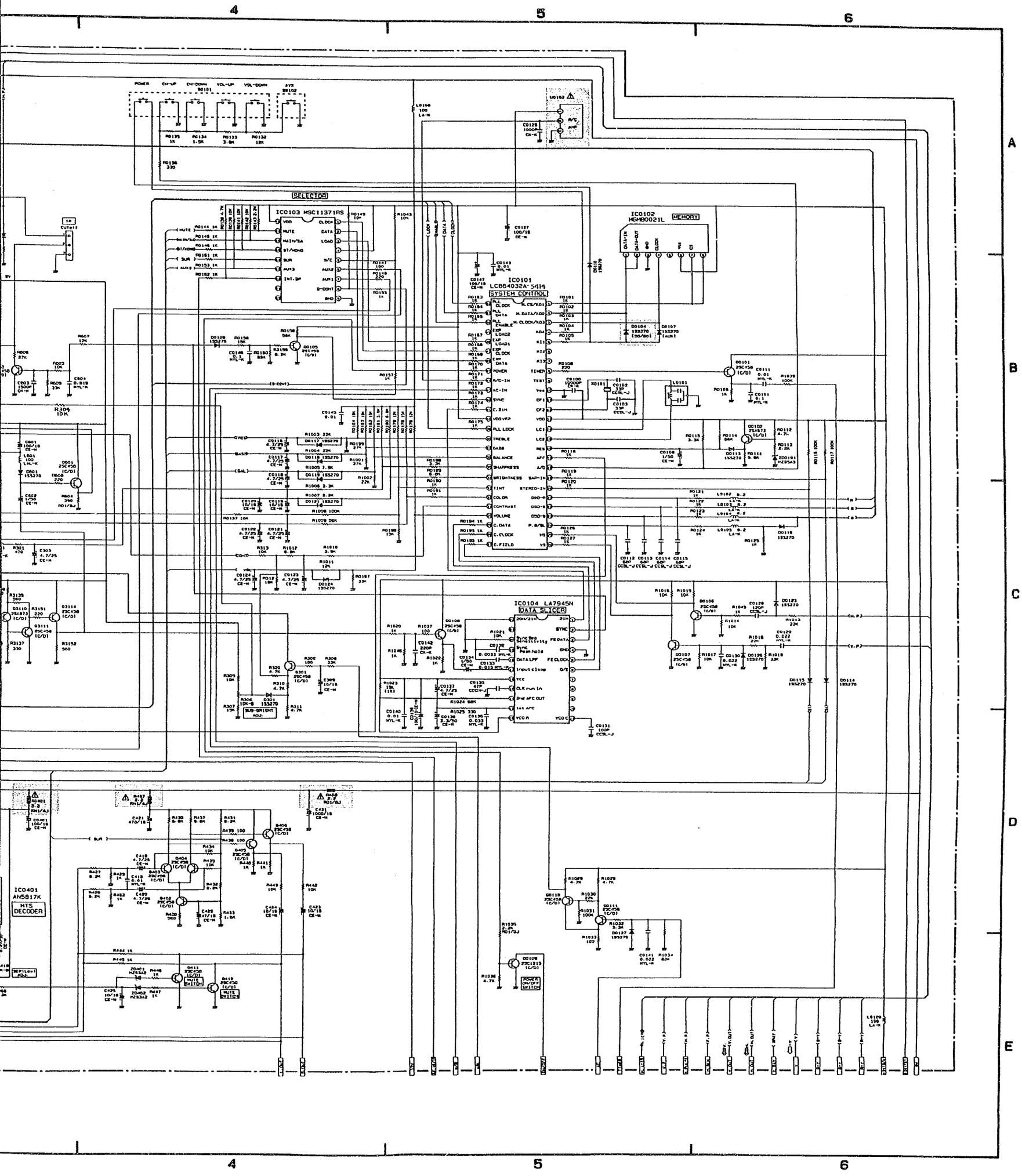

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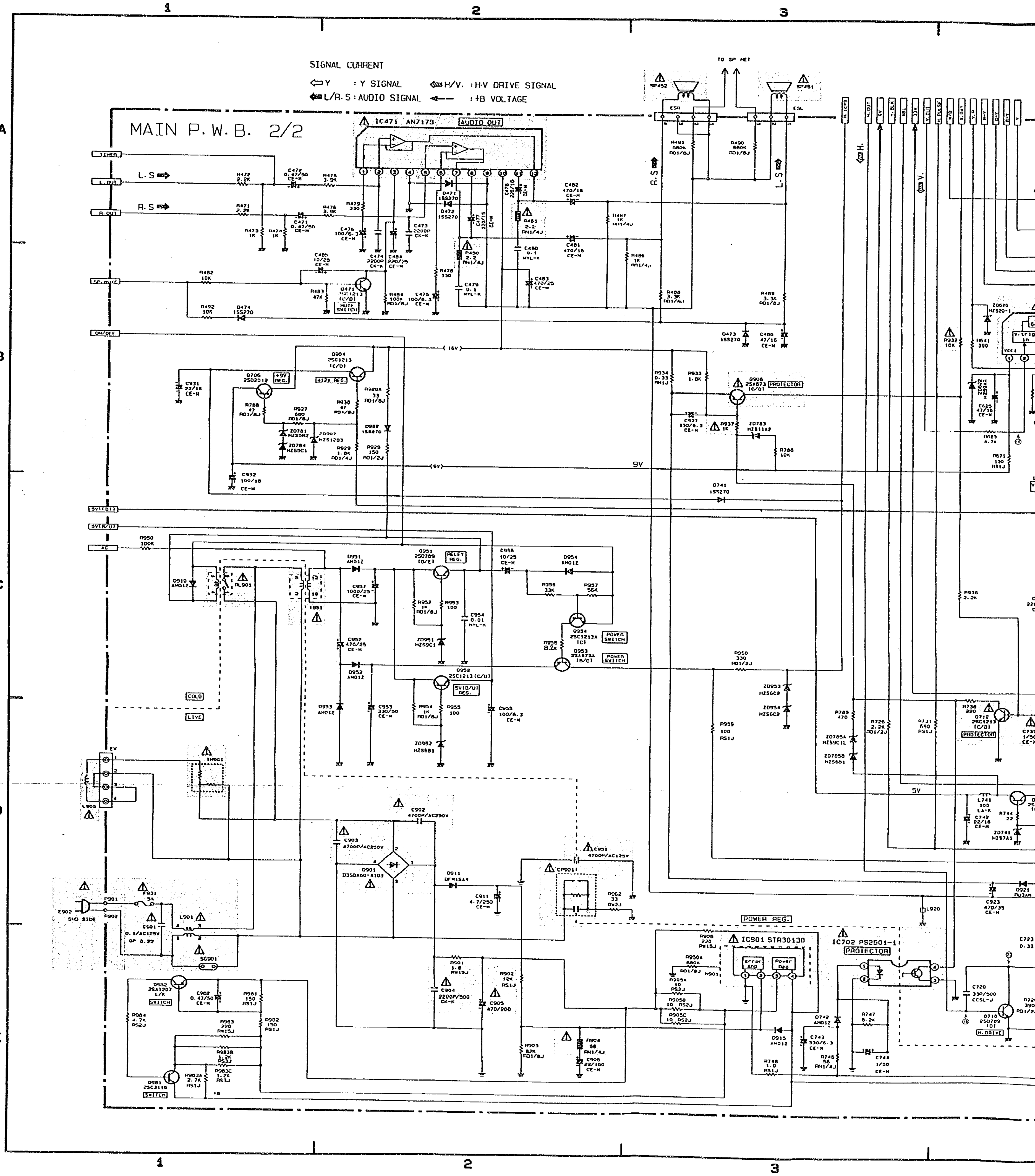
DIAGRAMME DE CIRCUIT DE BASE / BASIC



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BASE / BASIC CIRCUIT DIAGRAM

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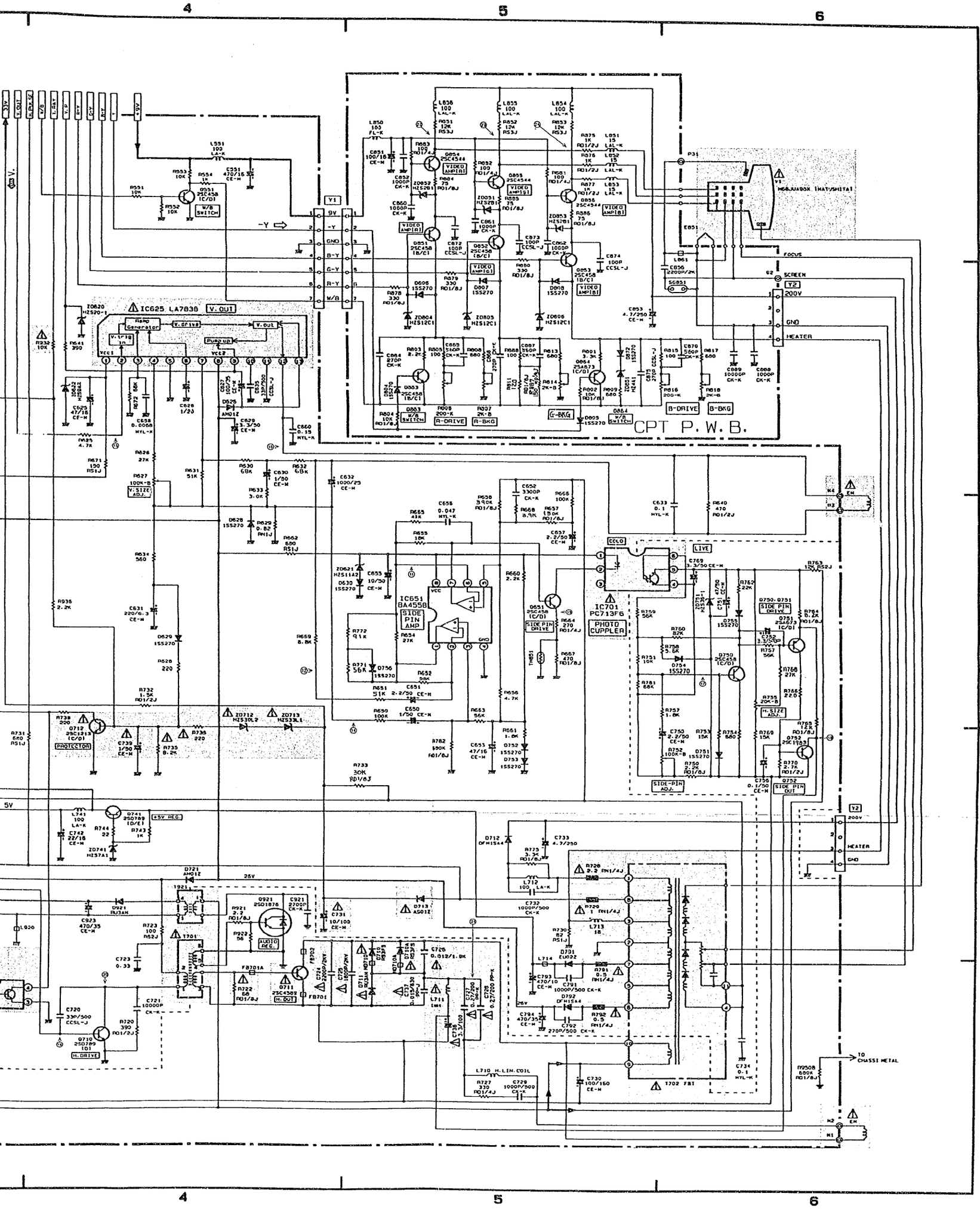

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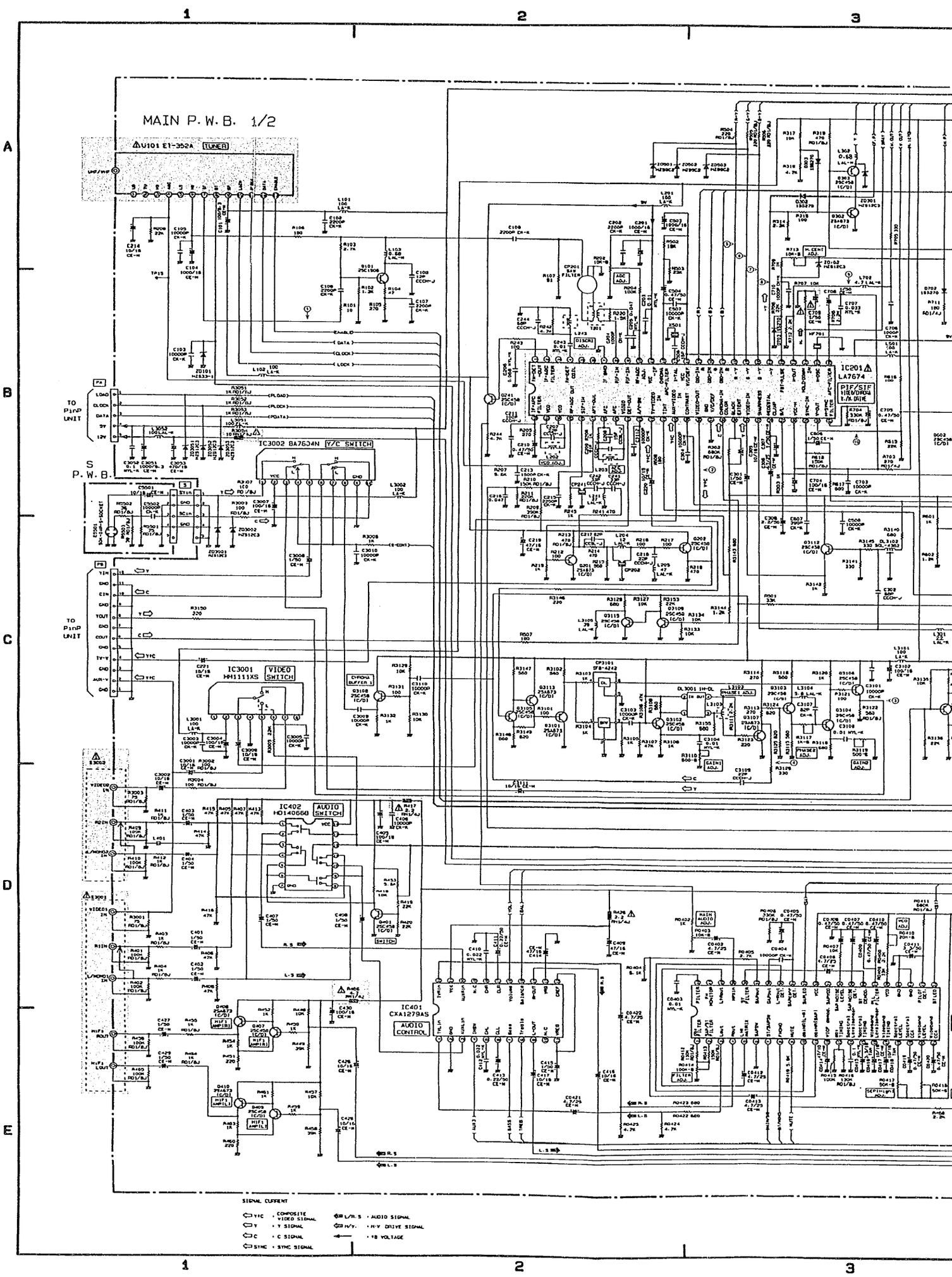

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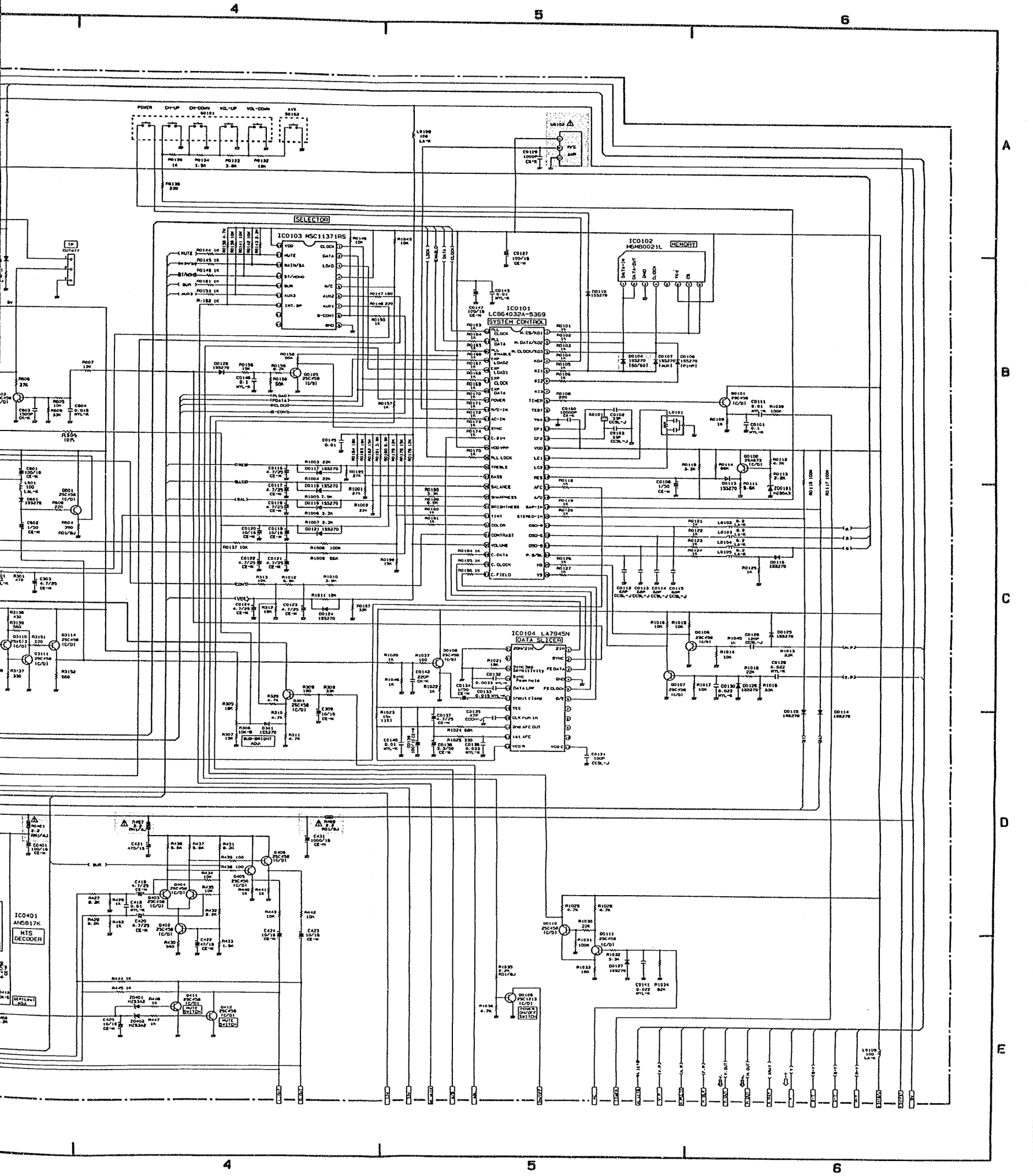

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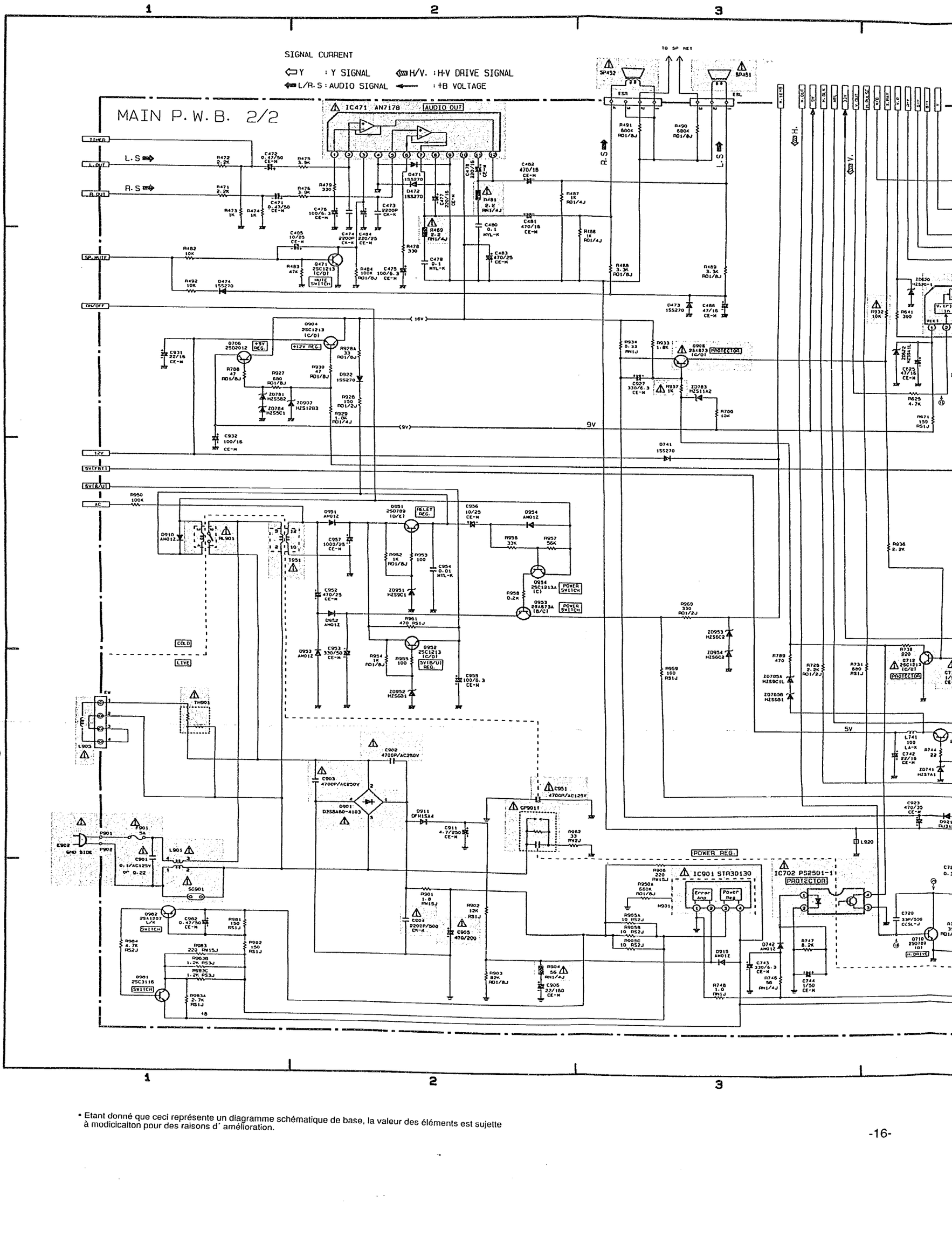

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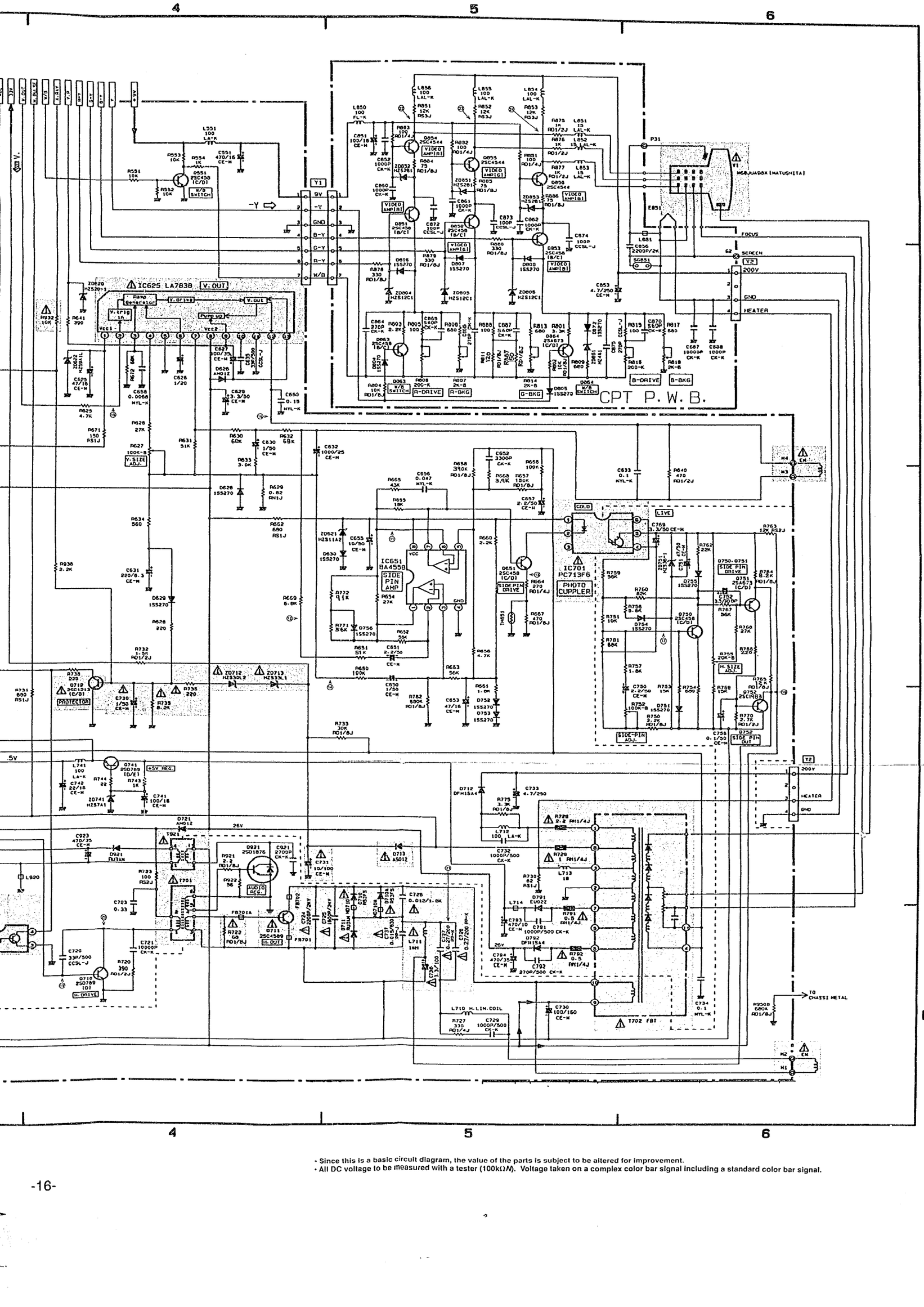

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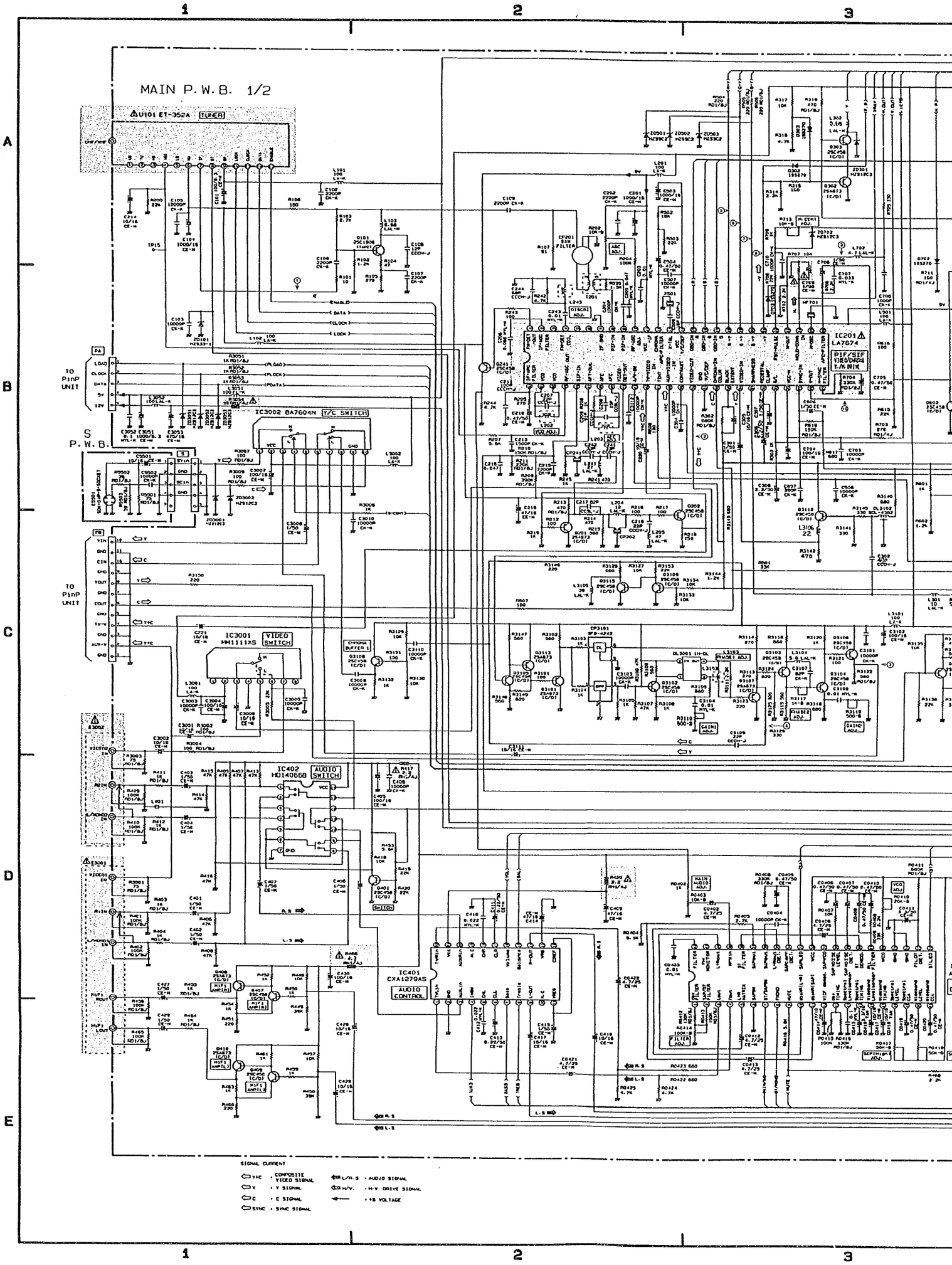

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CUIT DE BASE / BASIC CIRCUIT DIAGRAM

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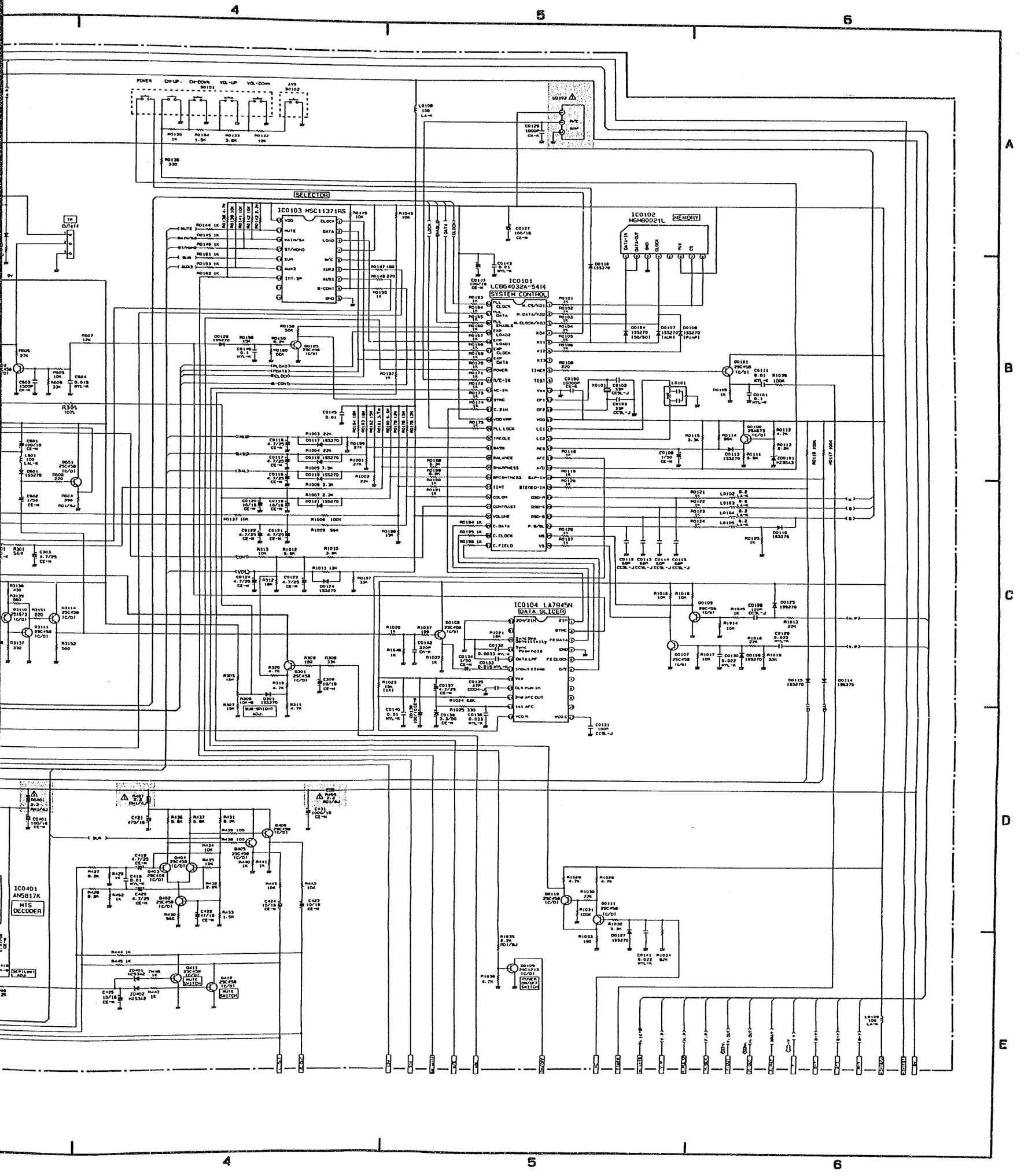

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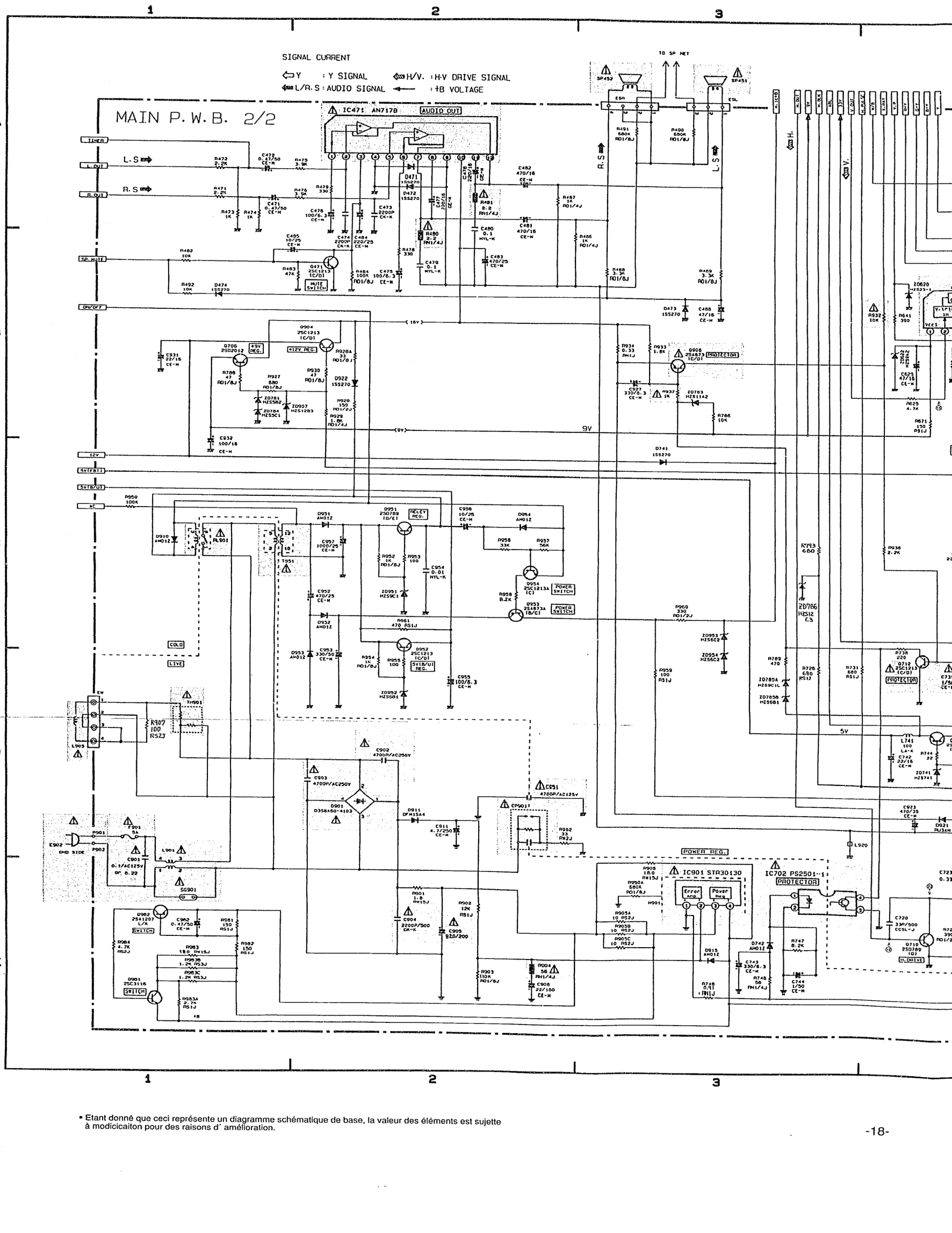
DIAGRAMME DE CIRCUIT DE BASE / BASIC



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BASE / BASIC CIRCUIT DIAGRAM

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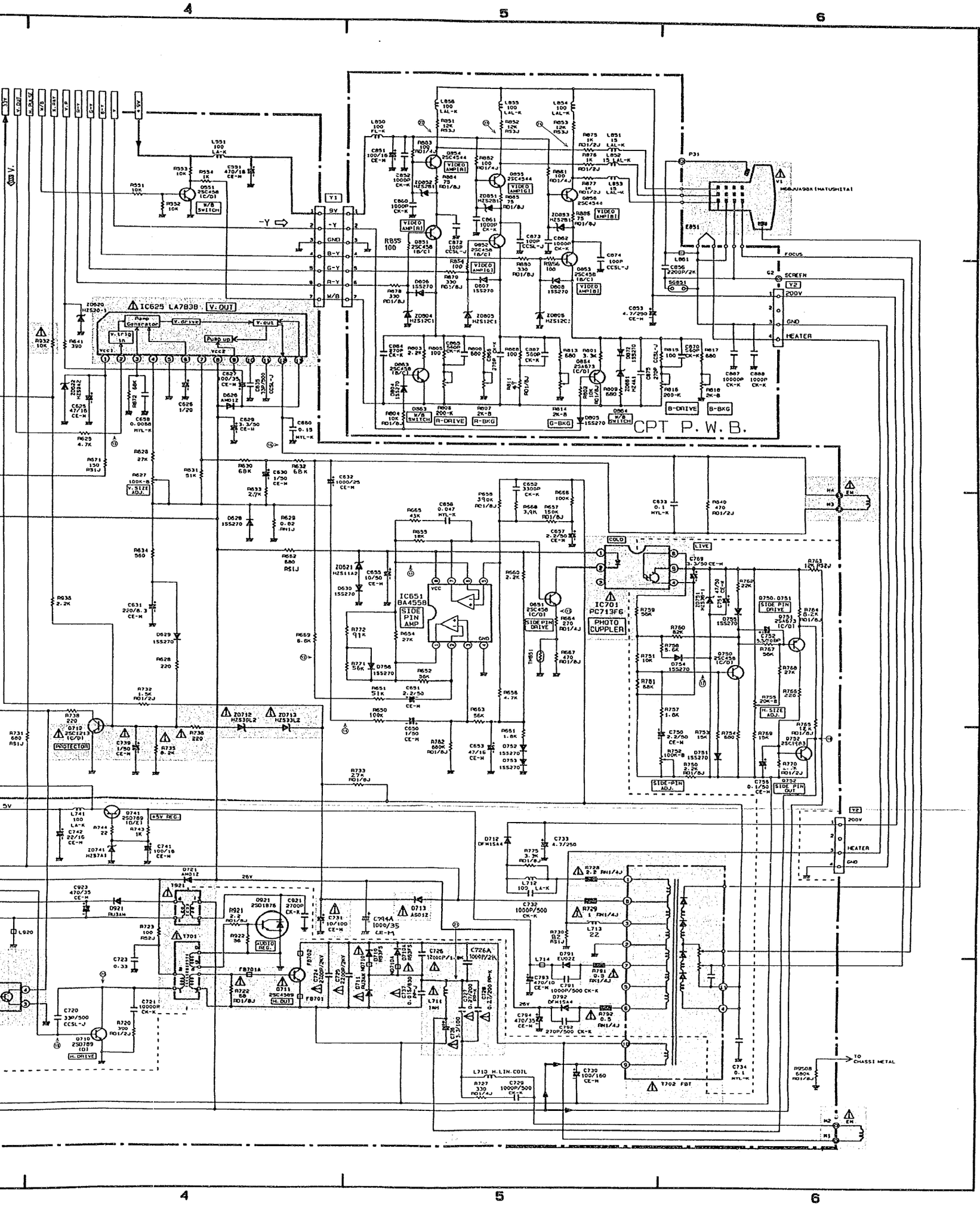

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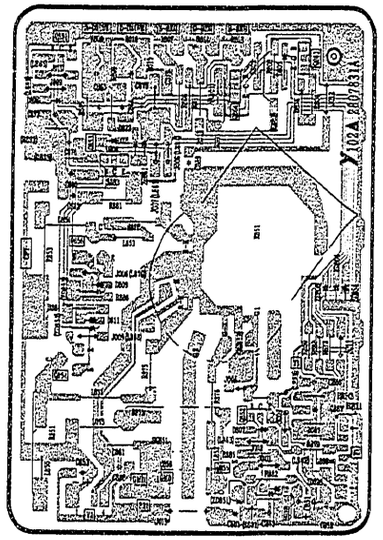
PLAQUETTE DE CABLAGE IMPRIMES / PRINTED WIRING BOARD

C.P.T. P.W.B.



MAIN P.W.B.

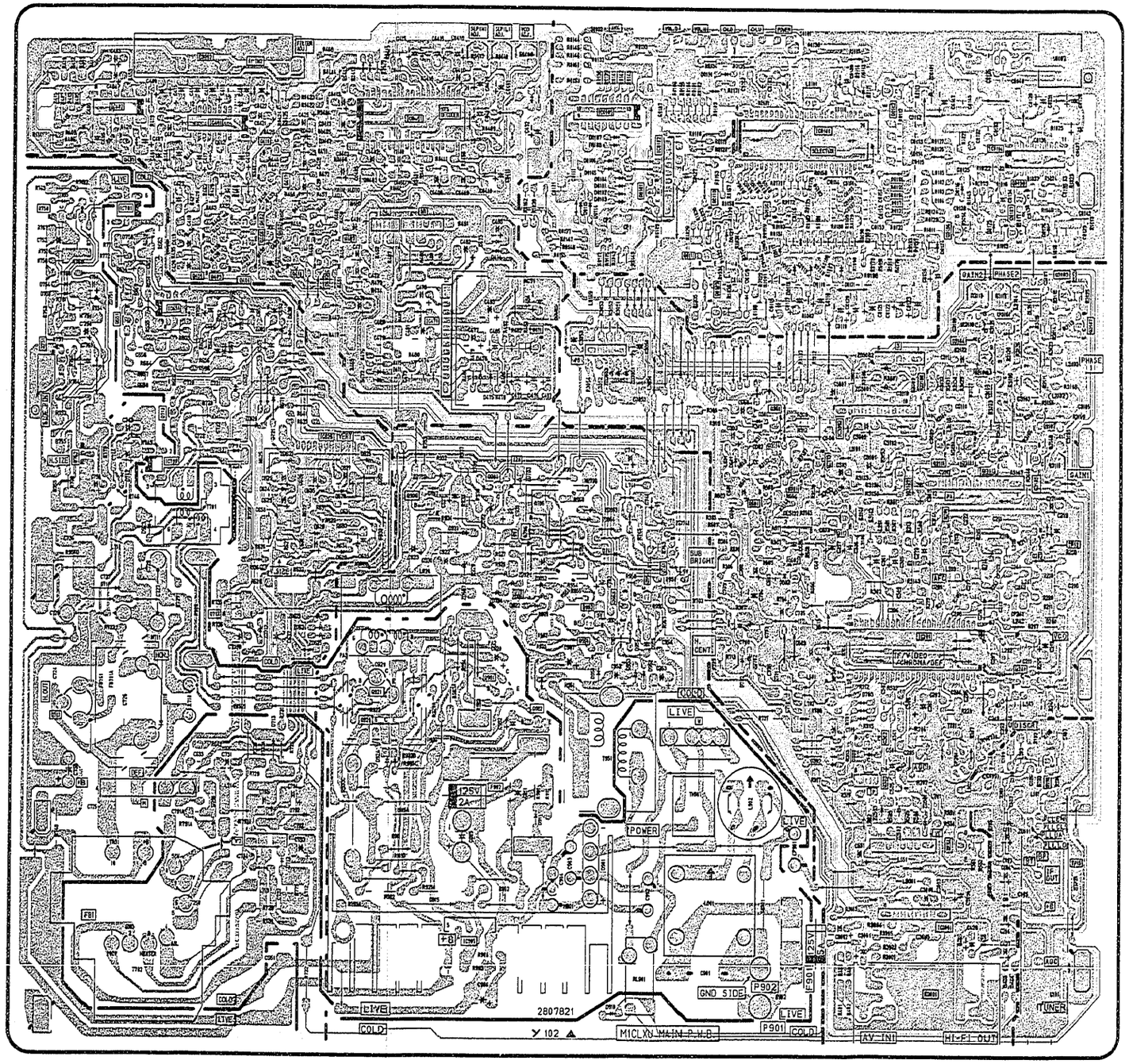


DIAGRAMME DE CABLAGE / WIRING DIAGRAM

WIRING DRAWING OF CY31 / 31DX11B FINAL ASSEMBLY

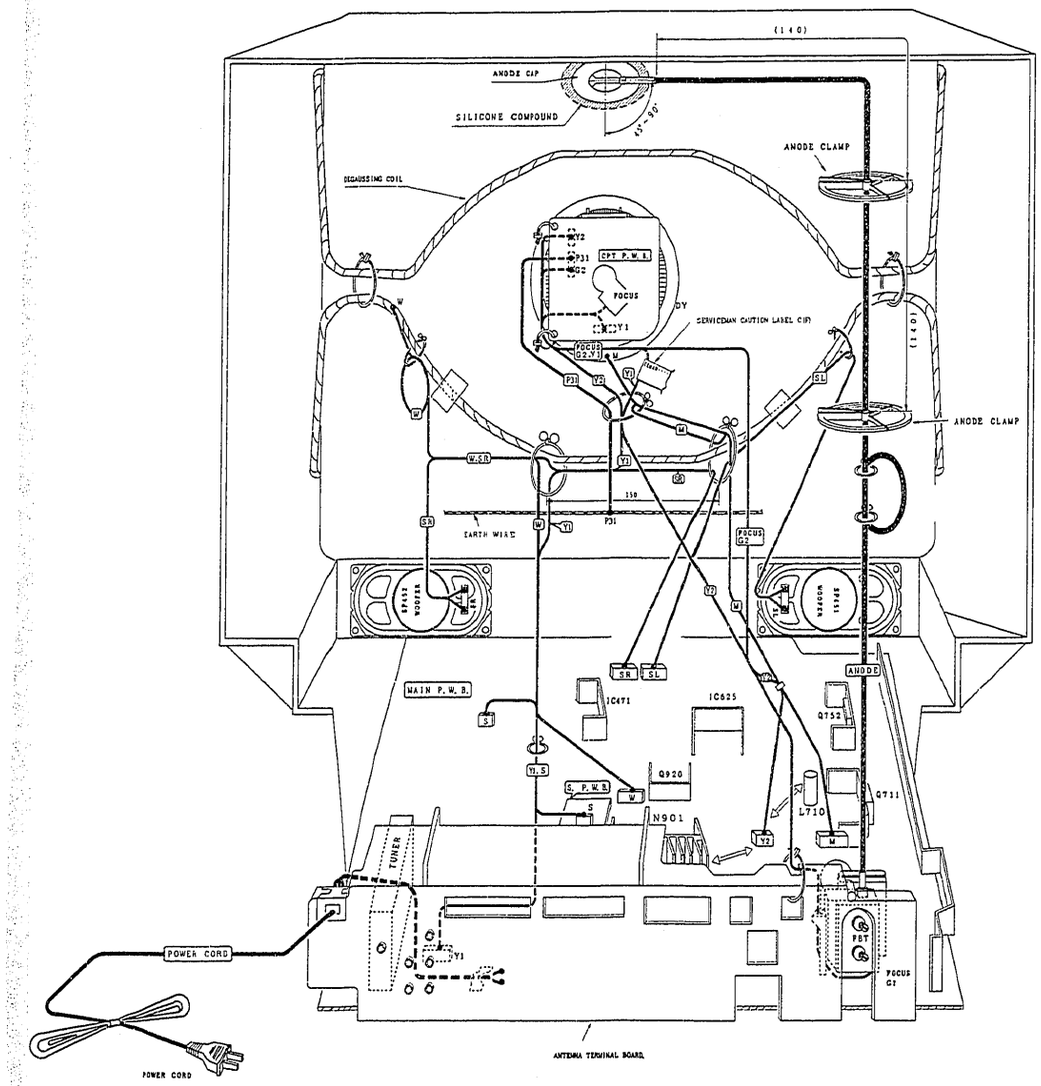


DIAGRAMME DE CABLAGE / WIRING DIAGRAM

WIRING DRAWING OF CY35 / CY33 / 31GX31B / 31DX21B FINAL ASSEMBLY

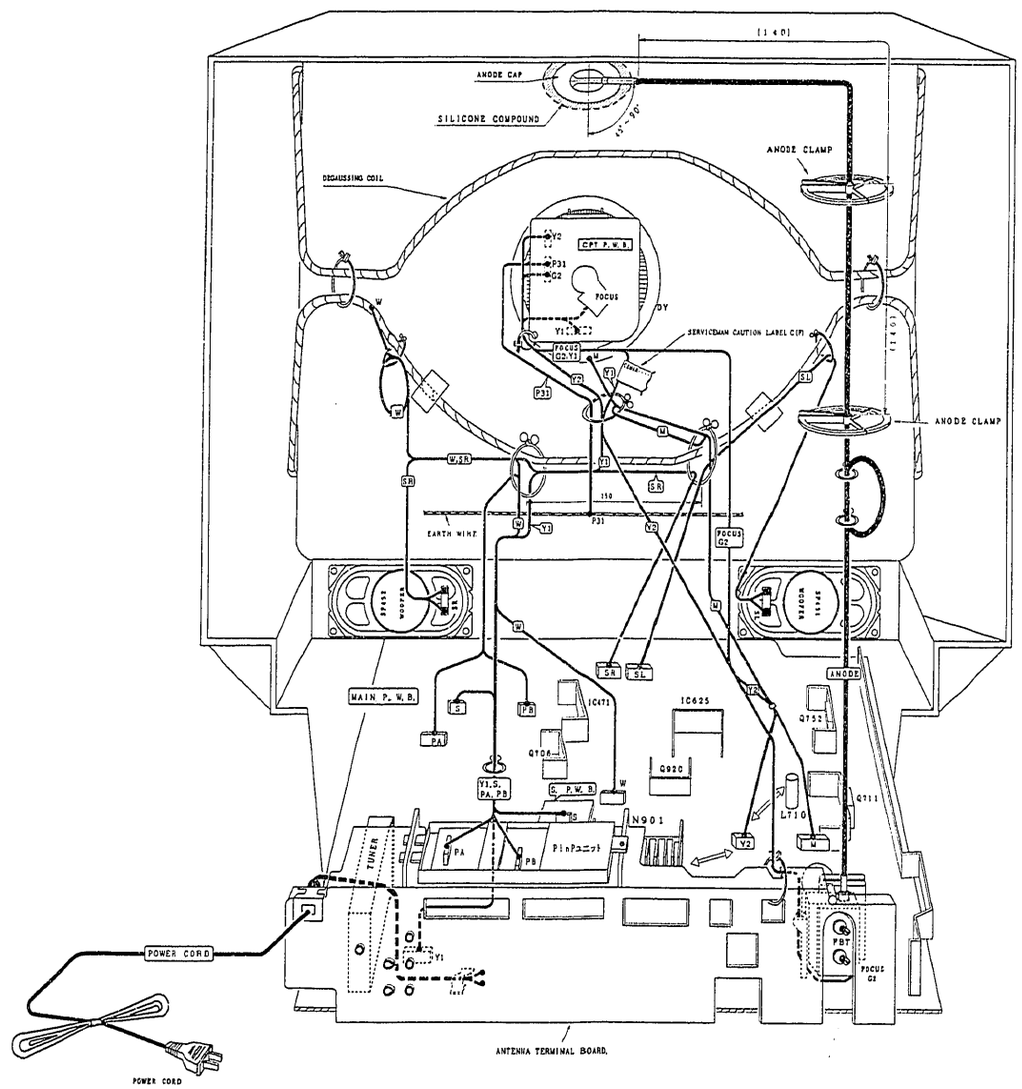
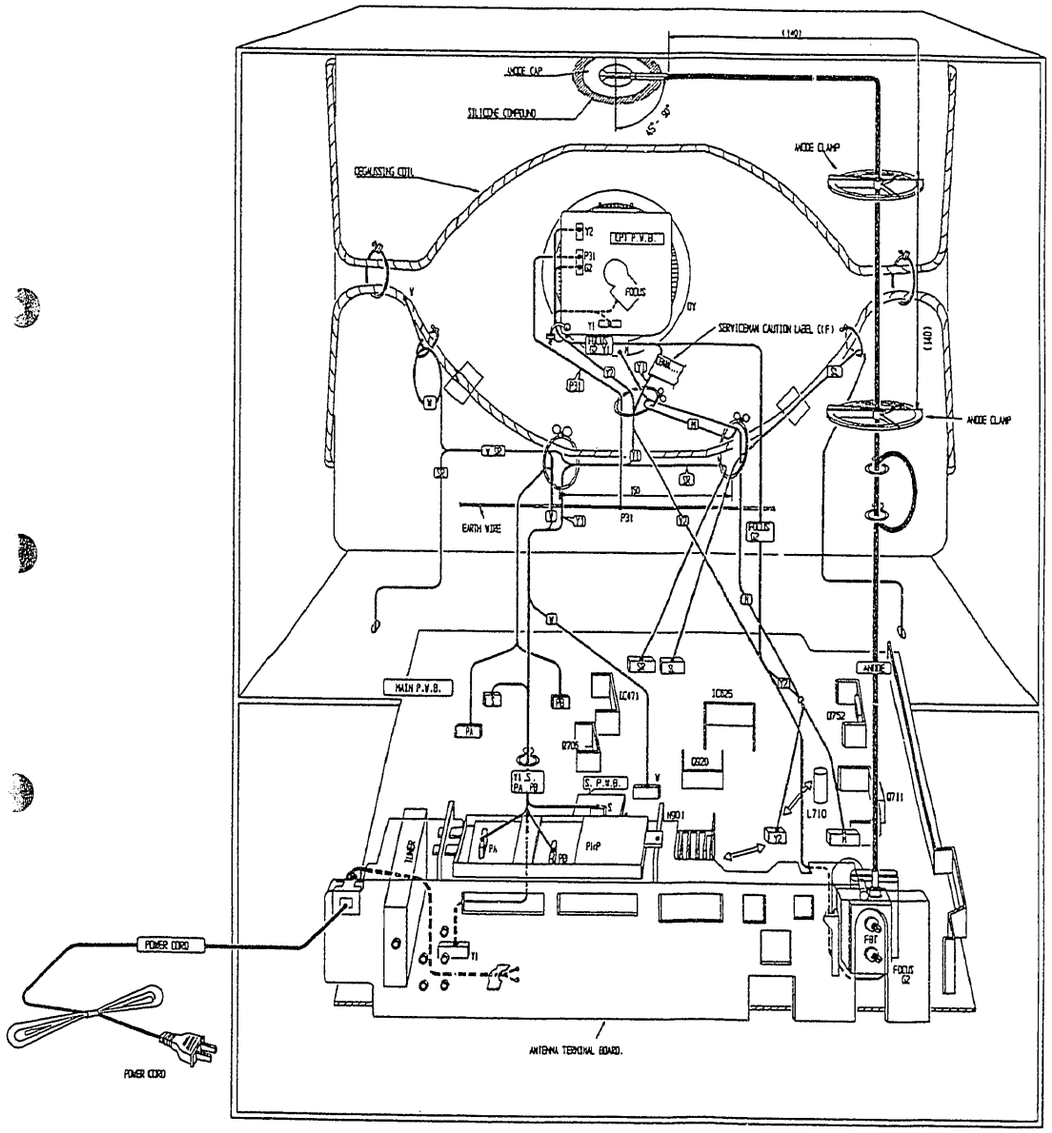


DIAGRAMME DE CABLAGE / WIRING DIAGRAM

WIRING DRAWING OF 31KX39K FINAL ASSEMBLY



REPLACEMENT PARTS LIST

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ABBREVIATION

Capacitors _ _ _ _ CD: Ceramic Disc, PF: Polyester Film, EL: Electrolytic, PP: Polypropylene, PR: Paper, TA:Tantalum, TM: Trimmer
Resistors _ _ _ _ _ CF: Carbon Film, CC: Carbon Composition, MF: Metal Oxide Film, VR: Variable Resistor, WW: Wire Wound, FR: Fuse Resistor, MG: Metal Glazed
Semiconductors _ _ TR: Transistor, DI: Diode, ZD: Zener Diode, VA: Varistor, TH: Thermisor, IC: Integrated Circuit

SYMBOL NO.	PART NO.	PART DESCRIPTION
		CAPACITORS
C0101	0880057	CAPACITOR POLYESTER FILM 0.1MF +-10% 50V
C0102	0890067	CAPACITOR CERAMIC DISCAL 33PF +-5% 50V
C0103	0890067	CAPACITOR CERAMIC DISCAL 33PF +-5% 50V
C0108	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C0111	0244171	CD 0.01MF +80-20% 50V
C0112	0890072	CAPACITOR,CERAMIC DISCAL 68PF +-5% 50V
C0113	0890072	CAPACITOR,CERAMIC DISCAL 68PF +-5% 50V
C0114	0890072	CAPACITOR,CERAMIC DISCAL 68PF +-5% 50V
C0115	0890072	CAPACITOR,CERAMIC DISCAL 68PF +-5% 50V
C0116	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0117	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0118	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0119	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C0120	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C0121	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0122	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0123	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0124	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0126	0890087	CAPACITOR CERAMIC DISCAL 1000PF +-10% 50V
C0127	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C0128	0890075	CAPACITOR CERAMIC DISCAL 120PF +-5% 50V
C0129	0880048	CAPACITOR POLYESTER FILM 0.022MF +-10% 50V
C0130	0880048	CAPACITOR POLYESTER FILM 0.022MF +-10% 50V
C0131	0890074	CAPACITOR CERAMIC DISCAL 100PF +-5% 50V
C0132	0244107	CD 3300PF +-10% 50V
C0133	0880046	CAPACITOR POLYESTER FILM 0.015MF +-10% 50V
C0134	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C0135	0890069	CAPACITOR,CERAMIC DISCAL 47PF +-5% 50V
C0136	0880051	CAPACITOR POLYESTER FILM 0.033MF +-10% 50V
C0137	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0138	0800007	CAPACITOR,ELECTROLYTIC 3.3MF 50V
C0139	0800048	CAPACITOR ELECTROLYTIC 100MF 10V
C0140	0244171	CD 0.01MF +80-20% 50V
C0141	0880048	CAPACITOR POLYESTER FILM 0.022MF +-10% 50V
C0142	0890078R	CAPACITOR CERAMIC DISCAL 220PF +-10% 50V
C0143	0880044	CAPACITOR POLYESTER FILM 0.01MF +-10% 50V
C0145	0880044	CAPACITOR POLYESTER FILM 0.01MF +-10% 50V
C0146	0880057	CAPACITOR POLYESTER FILM 0.1MF +-10% 50V
C0147	0800048	CAPACITOR ELECTROLYTIC 100MF 10V
C0160	0244171	CD 0.01MF +80-20% 50V
C0401	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C0402	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0403	0880044	CAPACITOR POLYESTER FILM 0.01MF +-10% 50V
C0404	0244171	CD 0.01MF +80-20% 50V
C0405	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C0406	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C0407	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C0408	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0409	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C0410	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C0411	0800007	CAPACITOR,ELECTROLYTIC 3.3MF 50V
C0412	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0413	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0414	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0415	0880057	CAPACITOR POLYESTER FILM 0.1MF +-10% 50V
C0416	0292712F	TA 3.3MF 16V
C0417	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C0418	0292714F	TA 10MF +-10% 16V
C0419	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C0420	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C0421	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C0422	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C101	0800047	CAPACITOR ELECTROLYTIC 100MF 6.3V
C102	0244105	CD 2200PF +-10% 50V
C103	0244171	CD 0.01MF +80-20% 50V
C104	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C105	0244171	CD 0.01MF +80-20% 50V
C106	0244105	CD 2200PF +-10% 50V
C107	0244105	CD 2200PF +-10% 50V
C108	0890115	CAPACITOR CERAMIC DISCAL 12PF +-5% 50V
C109	0244105	CD 2200PF +-10% 50V
C201	0800082	CAPACITOR ELECTROLYTIC 1000MF 16V
C202	0244105	CD 2200PF +-10% 50V
C203	0880044	CAPACITOR POLYESTER FILM 0.01MF +-10% 50V
C204	0890087	CAPACITOR CERAMIC DISCAL 1000PF +-10% 50V
C205	0880053	CAPACITOR POLYESTER FILM 0.047MF +-10% 50V
C206	0880055	CAPACITOR POLYESTER FILM 0.068MF +-10% 50V
C207	0246448	CD 22PF +-5% 50V
C208	0890116	CAPACITOR CERAMIC DISCAL 15PF +-5% 50V
C209	0246463	CD 91PF +-5% 50V
C210	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C211	0246464	CD 100PF +-5% 50V
C213	0890089	CAPACITOR CERAMIC DISCAL 1500PF +-10% 50V
C214	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C215	0244105	CD 2200PF +-10% 50V

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SYMBOL NO.	PART NO.	PART DESCRIPTION
C216	0880053	CAPACITOR POLYESTER FILM 0.047MF +-10% 50V
C217	0890073	CAPACITOR CERAMIC DISCAL 82PF +-5% 50V
C218	0246448	CD 22PF +-5% 50V
C219	0800041	CAPACITOR ELECTROLYTIC 47MF 16V
C220	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C221	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C241	0890121	CAPACITOR CERAMIC DISCAL 33PF +-5% 50V
C242	0890121	CAPACITOR CERAMIC DISCAL 33PF +-5% 50V
C243	0244171	CD 0.01MF +80-20% 50V
C244	0246460	CD 68PF +-5% 50V
C3001	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C3002	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C3003	0244171	CD 0.01MF +80-20% 50V
C3004	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C3005	0244171	CD 0.01MF +80-20% 50V
C3006	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C3007	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C3008	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C3009	0244171	CD 0.01MF +80-20% 50V
C301	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C3010	0244171	CD 0.01MF +80-20% 50V
C3011	0800023	CAPACITOR ELECTROLYTIC 22MF 16V (FOR 31DX11B)
C3012	0244171	CD 0.01MF +80-20% 50V (FOR 31DX11B)
C302.	0246460	CD 68PF +-5% 50V
C303	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C304	0244171	CD 0.01MF +80-20% 50V
C305	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C3051	0800079	CAPACITOR ELECTROLYTIC 1000MF 6.3V (DX21/GX31/KX39)
C3052	0880057	CAPACITOR POLYESTER FILM 0.1MF +-10% 50V (DX21/GX31/KX39)
C3053	0800074	CAPACITOR ELECTROLYTIC 470MF 16V (31DX21/GX31B/KX39)
C306	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C307	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C308	0800005	CAPACITOR,ELECTROLYTIC 2.2MF 50V
C309	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C3101	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C3102	0244171	CD 0.01MF +80-20% 50V
C3103	0244171	CD 0.01MF +80-20% 50V
C3104	0244171	CD 0.01MF +80-20% 50V
C3107	0890073	CAPACITOR CERAMIC DISCAL 82PF +-5% 50V
C3108	0244171	CD 0.01MF +80-20% 50V
C3109	0890065	CAPACITOR CERAMIC DISCAL 22PF +-5% 50V
C3110	0244171	CD 0.01MF +80-20% 50V
C3111	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C3112	0244171	CD 0.01MF +80-20% 50V
C401	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C402	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C403	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C404	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C405	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C406	0244171	CD 0.01MF +80-20% 50V
C407	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C408	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C409	0800041	CAPACITOR ELECTROLYTIC 47MF 16V
C410	0880048	CAPACITOR POLYESTER FILM 0.022MF +-10% 50V
C411	0253942	EL 0.22MF 50V
C412	0880048	CAPACITOR POLYESTER FILM 0.022MF +-10% 50V
C413	0253942	EL 0.22MF 50V
C414	0800041	CAPACITOR ELECTROLYTIC 47MF 16V
C415	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C416	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C417	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C418	0880044	CAPACITOR POLYESTER FILM 0.01MF +-10% 50V
C419	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C420	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C421	0800074	CAPACITOR ELECTROLYTIC 470MF 16V
C422	0800041	CAPACITOR ELECTROLYTIC 47MF 16V
C423	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C424	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C425	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C426	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C427	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C428	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C429	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C430	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C431	0800082	CAPACITOR ELECTROLYTIC 1000MF 16V
C471	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C472	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C473	0244105	CD 2200PF +-10% 50V
C474	0244105	CD 2200PF +-10% 50V
C475	0800047	CAPACITOR ELECTROLYTIC 100MF 6.3V
C476	0800047	CAPACITOR ELECTROLYTIC 100MF 6.3V
C477	0800058	CAPACITOR ELECTROLYTIC 220MF 16V
C478	0800058	CAPACITOR ELECTROLYTIC 220MF 16V
C479	0880057	CAPACITOR POLYESTER FILM 0.1MF +-10% 50V
C480	0880057	CAPACITOR POLYESTER FILM 0.1MF +-10% 50V
C481	0800074	CAPACITOR ELECTROLYTIC 470MF 16V
C482	0800074	CAPACITOR ELECTROLYTIC 470MF 16V
C483	0800075	CAPACITOR ELECTROLYTIC 470MF 25V
C484	0800059	CAPACITOR ELECTROLYTIC 220MF 25V
C485	0800016	CAPACITOR ELECTROLYTIC 10MF 25V
C486	0800041	CAPACITOR ELECTROLYTIC 47MF 16V
C503	0800082	CAPACITOR ELECTROLYTIC 1000MF 16V
C504	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C506	0246445	CD 16PF +-5% 50V
C507	0244171	CD 0.01MF +80-20% 50V
C508	0244171	CD 0.01MF +80-20% 50V
C5501	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C5502	0244171	CD 0.01MF +80-20% 50V
C551	0800074	CAPACITOR ELECTROLYTIC 470MF 16V
C601	0800048	CAPACITOR ELECTROLYTIC 100MF 10V
C602	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C603	0890089	CAPACITOR CERAMIC DISCAL 1500PF +-10% 50V
C604	0880046	CAPACITOR POLYESTER FILM 0.015MF +-10% 50V
C606	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C607	0890082R	CAPACITOR CERAMIC DISCAL 390PF +-10% 50V
C625	0800041	CAPACITOR ELECTROLYTIC 47MF 16V
C626	0292716	TA 1MF +-10% 20V
C627	0800052	CAPACITOR ELECTROLYTIC 100MF 35V
C629	0800007	CAPACITOR,ELECTROLYTIC 3.3MF 50V
C630	0800003	CAPACITOR ELECTROLYTIC 1MF 50V

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SYMBOL NO.	PART NO.	PART DESCRIPTION
C631	0800056	CAPACITOR,ELECTROLYTIC 220MF 6.3V
C632	0800083	CAPACITOR ELECTROLYTIC 1000MF 25V
C633	0880057	CAPACITOR POLYESTER FILM 0.1MF +-10% 50V
C635	0247842	CD 33PF +-5% 500V
C650	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C651	0800005	CAPACITOR,ELECTROLYTIC 2.2MF 50V
C652	0244107	CD 3300PF +-10% 50V
C653	0800041	CAPACITOR ELECTROLYTIC 47MF 16V
C655	0800018	CAPACITOR ELECTROLYTIC 10MF 50V
C656	0880053	CAPACITOR POLYESTER FILM 0.047MF +-10% 50V
C657	0800005	CAPACITOR,ELECTROLYTIC 2.2MF 50V
C658	0880042	CAPACITOR POLYESTER FILM 6800PF +-10% 50V
C660	0880059	CAPACITOR POLYESTER FILM 0.15MF 50V
C703	0244171	CD 0.01MF +80-20% 50V
C704	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C705	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C706	0890087	CAPACITOR CERAMIC DISCAL 1000PF +-10% 50V
C707	0880051	CAPACITOR POLYESTER FILM 0.033MF +-10% 50V
C708	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
⚠ C709	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C710	0890087	CAPACITOR CERAMIC DISCAL 1000PF +-10% 50V
C720	0247842	CD 33PF +-5% 500V
C721	0244141	CD 0.01MF +-10% 50V
C723	0880019	CAPACITOR POLYESTER FILM 0.33MF +-10% 50V
⚠C724	0244215	CD 2200PF +-10% 2KV
⚠C725	0244214	CD 1800PF +-10% 2KV
⚠C726	0262429F	PP 0.012MF +-5% 1800V
⚠C726A	0244211	CD 1000PF +-10% 2KV
⚠C727	0299931	PP 0.27MF +-10% 200V
⚠C728	0299931	PP 0.27MF +-10% 200V
C729	0244501	CD 1000PF +-10% 500V
C730	0254823	EL 100MF 160V
⚠C731	0800021	CAPACITOR ELECTROLYTIC 10MF 100V
C732	0244501	CD 1000PF +-10% 500V
C733	0259171	EL 4.7MF 250V
C734	0880057	CAPACITOR POLYESTER FILM 0.1MF +-10% 50V
⚠C736	0263001	EL 3.3MF 100V
⚠C737	0299707	PP 0.015MF +-10% 630V
⚠C739	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C741	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V (31DX21/GX31B/KX39K)
C742	0800023	CAPACITOR ELECTROLYTIC 22MF 16V
C743	0800064	CAPACITOR ELECTROLYTIC 330MF 6.3V
C744	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C750	0800005	CAPACITOR,ELECTROLYTIC 2.2MF 50V
C751	0800044	CAPACITOR ELECTROLYTIC 47MF 50V
C752	0284628R	EL 3.3MF 50V
C756	0253942	EL 0.22MF 50V
C769	0800007	CAPACITOR,ELECTROLYTIC 3.3MF 50V
C782	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C791	0244501	CD 1000PF +-10% 500V
C792	0243506	CD 270PF +-10% 500V
C793	0800073	CAPACITOR ELECTROLYTIC 470MF 10V
C794	0800076	CAPACITOR ELECTROLYTIC 470MF 35V
C851	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C852	0890087	CAPACITOR CERAMIC DISCAL 1000PF +-10% 50V
C853	0257540	EL 4.7MF 250V
C856	0244729F	CD 2200PF +-10% 2KV
C860	0890087	CAPACITOR CERAMIC DISCAL 1000PF +-10% 50V
C861	0890087	CAPACITOR CERAMIC DISCAL 1000PF +-10% 50V
C862	0890087	CAPACITOR CERAMIC DISCAL 1000PF +-10% 50V
C864	0890079R	CAPACITOR,CERAMIC DISCAL 270PF +-10% 50V
C865	0890084	CAPACITOR CERAMIC DISCAL 560PF +-10% 50V
C866	0890079R	CAPACITOR,CERAMIC DISCAL 270PF +-10% 50V
C870	0890084	CAPACITOR CERAMIC DISCAL 560PF +-10% 50V
C872	0890074	CAPACITOR CERAMIC DISCAL 100PF +-5% 50V
C873	0890074	CAPACITOR CERAMIC DISCAL 100PF +-5% 50V
C874	0890074	CAPACITOR CERAMIC DISCAL 100PF +-5% 50V
C875	0890079R	CAPACITOR,CERAMIC DISCAL 270PF +-10% 50V
C887	0890084	CAPACITOR CERAMIC DISCAL 560PF +-10% 50V
C888	0890087	CAPACITOR CERAMIC DISCAL 1000PF +-10% 50V
C889	0244171	CD 0.01MF +80-20% 50V
⚠C901	0279718	PF 0.1MF +-10% 125V
⚠C902	0248593F	CD 4700PF +80-20% 250V
⚠C903	0248593F	CD 4700PF +80-20% 250V
⚠C904	0244563	CD 2200PF +100-0% 500V
⚠C905	0253891	EL 470MF 200V
C906	0253957	EL 22MF 160V
C911	0259171	EL 4.7MF 250V
C921	0244216	CD 2700PF 2000V +-10%
C923	0800076	CAPACITOR ELECTROLYTIC 470MF 35V
C927	0800064	CAPACITOR ELECTROLYTIC 330MF 6.3V
C931	0800023	CAPACITOR ELECTROLYTIC 22MF 16V
⚠C951	0249394	CD 4700PF +-20%
C952	0800075	CAPACITOR ELECTROLYTIC 470MF 25V
C953	0800069	CAPACITOR,ELECTROLYTIC 330MF 50V
C954	0244171	CD 0.01MF +80-20% 50V
C955	0800047	CAPACITOR ELECTROLYTIC 100MF 6.3V
C956	0800016	CAPACITOR ELECTROLYTIC 10MF 25V
C957	0800083	CAPACITOR ELECTROLYTIC 1000MF 25V
C982	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V

RESISTORS

RTP15	0110125	MF 150 OHM +-5% 1W
R0101	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0102	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0103	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0104	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0105	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0106	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0107	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0108	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W
R0109	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0111	0700051	RESISTOR,CARBON FILM 5.6K OHM +-5% 1/16W
R0112	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W
R0113	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R0114	0700064	RESISTOR,CARBON FILM 56K OHM +-5% 1/16W
R0115	0700047	RESISTOR,CARBON FILM 3.3K OHM +-5% 1/16W
R0116	0700067	RESISTOR,CARBON FILM 100K OHM +-5% 1/16W
R0117	0700067	RESISTOR,CARBON FILM 100K OHM +-5% 1/16W

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SYMBOL NO.	PART NO.	PART DESCRIPTION
R0118	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0119	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0120	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0121	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0122	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0123	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0124	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0125	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0126	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0127	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0132	0700055	RESISTOR,CARBON FILM 12K OHM +-5% 1/16W
R0133	0187078	CF 3.6K OHM +-5% 1/16W
R0134	0700043	RESISTOR,CARBON FILM 1.5K OHM +-5% 1/16W
R0135	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0136	0700034	RESISTOR,CARBON FILM 330 OHM +-5% 1/16W
R0137	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R0138	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W
R0139	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R0141	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R0142	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R0143	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R0144	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0145	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0146	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0147	0700031	RESISTOR,CARBON FILM 180 OHM +-5% 1/16W
R0148	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W
R0149	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R0153	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0155	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0156	0700056	RESISTOR,CARBON FILM 15K OHM +-5% 1/16W
R0157	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0158	0700064	RESISTOR,CARBON FILM 56K OHM +-5% 1/16W
R0159	0700053	RESISTOR,CARBON FILM 8.2K OHM +-5% 1/16W
R0160	0700064	RESISTOR,CARBON FILM 56K OHM +-5% 1/16W
R0161	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0162	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0163	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0164	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0165	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0166	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W (DX21/GX31/KX39)
R0167	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0168	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0169	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0170	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0171	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0172	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0173	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0174	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0175	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0176	0700055	RESISTOR,CARBON FILM 12K OHM +-5% 1/16W
R0178	0700053	RESISTOR,CARBON FILM 8.2K OHM +-5% 1/16W
R0179	0700055	RESISTOR,CARBON FILM 12K OHM +-5% 1/16W
R0180	0700052	RESISTOR,CARBON FILM 6.8K OHM +-5% 1/16W
R0181	0700048	RESISTOR,CARBON FILM 3.9K OHM +-5% 1/16W
R0182	0700056	RESISTOR,CARBON FILM 15K OHM +-5% 1/16W
R0183	0700057	RESISTOR,CARBON FILM 18K OHM +-5% 1/16W
R0184	0700057	RESISTOR,CARBON FILM 18K OHM +-5% 1/16W
R0188	0700047	RESISTOR,CARBON FILM 3.3K OHM +-5% 1/16W
R0189	0700052	RESISTOR,CARBON FILM 6.8K OHM +-5% 1/16W
R0190	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0191	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0194	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0195	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0196	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0197	0700061	RESISTOR,CARBON FILM 33K OHM +-5% 1/16W
R0198	0700056	RESISTOR,CARBON FILM 15K OHM +-5% 1/16W
R0199	0700059	RESISTOR CARBON FILM 27K OHM +-5% 1/16W
R0401	01195051	FR 2.2 OHM +-5% 1/4W
R0402	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R0403	0150287	VR 10K OHM-B
R0404	0187082	CF 5.1K OHM +-5% 1/16W
R0405	0700046	RESISTOR,CARBON FILM 2.7K OHM +-5% 1/16W
R0406	0100125	CF 330K OHM +-5% 1/8W
R0407	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R0408	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R0409	0700061	RESISTOR,CARBON FILM 33K OHM +-5% 1/16W
R0410	0150157	VR 200K OHM-B RV-6
R0411	0100133	CF 680K OHM +-5% 1/8W
R0412	0100116	CF 130K OHM +-5% 1/8W
R0413	0100117	CF 150K OHM +-5% 1/8W
R0414	0150160	VR 10K OHM-B +-30%
R0415	0700067	RESISTOR,CARBON FILM 100K OHM +-5% 1/16W
R0416	0100116	CF 130K OHM +-5% 1/8W
R0417	0150290	VR 50K OHM (B)
R0418	0150290	VR 50K OHM (B)
R0419	0700051	RESISTOR,CARBON FILM 5.6K OHM +-5% 1/16W
R0422	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W
R0423	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W
R0424	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W
R0425	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W
R1001	0700059	RESISTOR CARBON FILM 27K OHM +-5% 1/16W
R1002	0700061	RESISTOR,CARBON FILM 33K OHM +-5% 1/16W
R1003	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W
R1004	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W
R1005	0187086	CF 7.5K OHM +-5% 1/16W
R1006	0700047	RESISTOR,CARBON FILM 3.3K OHM +-5% 1/16W
R1007	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R1008	0700067	RESISTOR,CARBON FILM 100K OHM +-5% 1/16W
R1009	0700056	RESISTOR,CARBON FILM 15K OHM +-5% 1/16W
R101	0700014	RESISTOR,CARBON FILM 10 OHM +-5% 1/16W
R1010	0700046	RESISTOR,CARBON FILM 2.7K OHM +-5% 1/16W
R1011	0700055	RESISTOR,CARBON FILM 12K OHM +-5% 1/16W
R1012	0700052	RESISTOR,CARBON FILM 6.8K OHM +-5% 1/16W
R1013	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W
R1014	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R1015	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R1016	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R1017	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R1018	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W
R1019	0700061	RESISTOR,CARBON FILM 33K OHM +-5% 1/16W

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
R102	0700042	RESISTOR,CARBON FILM 1.2K OHM +-5% 1/16W	R3007	0100041	CF 100 OHM +-5% 1/8W
R1020	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W	R3009	0100041	CF 100 OHM +-5% 1/8W
R1021	0700057	RESISTOR,CARBON FILM 18K OHM +-5% 1/16W	R301	0700036	RESISTOR,CARBON FILM 470 OHM +-5% 1/16W
R1022	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W	R302	0100133	CF 680K OHM +-5% 1/8W
R1023	0119635	MF 15K OHM +-1% 1/8W	R303	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R1024	0700065	RESISTOR CARBON FILM 68K OHM +-5% 1/16W	R304	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R1025	0700034	RESISTOR,CARBON FILM 330 OHM +-5% 1/16W	R305	0700057	RESISTOR,CARBON FILM 18K OHM +-5% 1/16W
R1028	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W	R3051	0100065	CF 1K OHM +-5% 1/8W (FOR 31DX21/GX31B/KX39K)
R1029	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W	R3052	0100065	CF 1K OHM +-5% 1/8W (FOR 31DX21/GX31B/KX39K)
R103	0700046	RESISTOR,CARBON FILM 2.7K OHM +-5% 1/16W	R3053	0100065	CF 1K OHM +-5% 1/8W (FOR 31DX21/GX31B/KX39K)
R1030	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W	⚠ R3054	0119514	FR 10 OHM +-5% 1/4W (FOR 31DX21/GX31B/KX39K)
R1031	0700067	RESISTOR,CARBON FILM 100K OHM +-5% 1/16W	R306	0150287	VR 10K OHM-B
R1032	0700047	RESISTOR,CARBON FILM 3.3K OHM +-5% 1/16W	R307	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R1033	0700031	RESISTOR,CARBON FILM 180 OHM +-5% 1/16W	R308	0700061	RESISTOR,CARBON FILM 33K OHM +-5% 1/16W
R1034	0700066	RESISTOR,CARBON FILM 82K OHM +-5% 1/16W	R309	0700031	RESISTOR,CARBON FILM 180 OHM +-5% 1/16W
R1035	0100073	CF 2.2K OHM +-5% 1/8W	R310	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W
R1036	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W	R3101	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W
R1037	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W	R3102	0700037	RESISTOR,CARBON FILM 560 OHM +-5% 1/16W
R1039	0700067	RESISTOR,CARBON FILM 100K OHM +-5% 1/16W	R3103	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R104	0700023	RESISTOR,CARBON FILM 47 OHM +-5% 1/16W	R3104	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R1043	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W	R3105	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R1045	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W	R3106	0700063	RESISTOR CARBON FILM 47K OHM +-5% 1/16W
R1046	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W	R3107	0700063	RESISTOR CARBON FILM 47K OHM +-5% 1/16W
R105	0700033	RESISTOR,CARBON FILM 270 OHM +-5% 1/16W	R3108	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R106	0700031	RESISTOR,CARBON FILM 180 OHM +-5% 1/16W	R3109	0700037	RESISTOR,CARBON FILM 560 OHM +-5% 1/16W
R107	0187040	CF 91 OHM +-5% 1/16W	R311	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W
R202	0150287	VR 10K OHM-B	R3110	0150282	VR 500 OHM(B)
R204	0700067	RESISTOR,CARBON FILM 100K OHM +-5% 1/16W	R3111	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R205	0700033	RESISTOR,CARBON FILM 270 OHM +-5% 1/16W	R3113	0700033	RESISTOR,CARBON FILM 270 OHM +-5% 1/16W
R206	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W	R3114	0700033	RESISTOR,CARBON FILM 270 OHM +-5% 1/16W
R207	0700051	RESISTOR,CARBON FILM 5.6K OHM +-5% 1/16W	R3115	0700037	RESISTOR,CARBON FILM 560 OHM +-5% 1/16W
R208	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W	R3116	0700037	RESISTOR,CARBON FILM 560 OHM +-5% 1/16W
R209	0100127	CF 390K OHM +-5% 1/8W	R3117	0150283	VR 1K OHM-B
R210	0100117	CF 150K OHM +-5% 1/8W	R3118	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W
R211	0100121	CF 220K OHM +-5% 1/8W	R3119	0150282	VR 500 OHM(B)
R212	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W	R312	0700057	RESISTOR,CARBON FILM 18K OHM +-5% 1/16W
R213	0100057	CF 470 OHM +-5% 1/8W	R3120	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R214	0700036	RESISTOR,CARBON FILM 470 OHM +-5% 1/16W	R3121	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W
R215	0700037	RESISTOR,CARBON FILM 560 OHM +-5% 1/16W	R3122	0100059	CF 560 OHM +-5% 1/8W
R216	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W	R3123	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W
R217	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W	R3124	0700039	RESISTOR,CARBON FILM 820 OHM +-5% 1/16W
R218	0700036	RESISTOR,CARBON FILM 470 OHM +-5% 1/16W	R3125	0700039	RESISTOR,CARBON FILM 820 OHM +-5% 1/16W
R219	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W	R3126	0700034	RESISTOR,CARBON FILM 330 OHM +-5% 1/16W
R220	0700043	RESISTOR,CARBON FILM 1.5K OHM +-5% 1/16W	R3127	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R241	0700036	RESISTOR,CARBON FILM 470 OHM +-5% 1/16W	R3128	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W
R242	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W	R3129	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R243	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W	R313	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R244	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W	R3130	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R245	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W	R3131	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W
R3001	0100038	CF 75 OHM +-5% 1/8W	R3132	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R3002	0100041	CF 100 OHM +-5% 1/8W	R3133	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R3003	0100038	CF 75 OHM +-5% 1/8W	R3134	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R3004	0100041	CF 100 OHM +-5% 1/8W	R3135	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R3005	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W	R3136	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W
R3006	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W	R3137	0700034	RESISTOR,CARBON FILM 330 OHM +-5% 1/16W

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
R3138	0187056	CF 430 OHM +-5% 1/16W	R438	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W
R3139	0700037	RESISTOR,CARBON FILM 560 OHM +-5% 1/16W	R439	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W
R314	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W	R440	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R3140	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W	R441	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R3141	0700034	RESISTOR,CARBON FILM 330 OHM +-5% 1/16W	R442	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R3142	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W	R443	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R3143	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W	R444	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R3144	0700042	RESISTOR,CARBON FILM 1.2K OHM +-5% 1/16W	R445	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R3145	0700034	RESISTOR,CARBON FILM 330 OHM +-5% 1/16W	R446	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R3146	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W	R447	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R3147	0700037	RESISTOR,CARBON FILM 560 OHM +-5% 1/16W	R448	0700062	RESISTOR,CARBON FILM 39K OHM +-5% 1/16W
R3148	0700037	RESISTOR,CARBON FILM 560 OHM +-5% 1/16W	R449	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R3149	0187060	CF 620 OHM +-5% 1/16W	R450	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R315	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W	R451	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W
R3150	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W	R452	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R3151	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W	R453	0700051	RESISTOR,CARBON FILM 5.6K OHM +-5% 1/16W
R3152	0700037	RESISTOR,CARBON FILM 560 OHM +-5% 1/16W	R454	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R3153	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W	R455	0100065	CF 1K OHM +-5% 1/8W
R3155	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W	R456	0100113	CF 100K OHM +-5% 1/8W
R317	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W	R457	0700062	RESISTOR,CARBON FILM 39K OHM +-5% 1/16W
R318	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W	R458	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R319	0114147	CF 470 OHM +-5% 1/4W	R459	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R320	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W	R460	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W
R401	0100113	CF 100K OHM +-5% 1/8W	R461	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R402	0100113	CF 100K OHM +-5% 1/8W	R462	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R403	0100065	CF 1K OHM +-5% 1/8W	R463	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R404	0100065	CF 1K OHM +-5% 1/8W	R464	0100065	CF 1K OHM +-5% 1/8W
R405	0700063	RESISTOR CARBON FILM 47K OHM +-5% 1/16W	R465	0100113	CF 100K OHM +-5% 1/8W
R406	0700063	RESISTOR CARBON FILM 47K OHM +-5% 1/16W	⚠ R466	0119687	FR 4.7 OHM +-5% 1/4W
R407	0700063	RESISTOR CARBON FILM 47K OHM +-5% 1/16W	⚠ R467	01195051	FR 2.2 OHM +-5% 1/4W
R408	0700063	RESISTOR CARBON FILM 47K OHM +-5% 1/16W	R468	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R409	0100113	CF 100K OHM +-5% 1/8W	⚠ R469	01195051	FR 2.2 OHM +-5% 1/4W
R410	0100113	CF 100K OHM +-5% 1/8W	R471	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R411	0100065	CF 1K OHM +-5% 1/8W	R472	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R412	0100065	CF 1K OHM +-5% 1/8W	R473	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R413	0700063	RESISTOR CARBON FILM 47K OHM +-5% 1/16W	R474	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R414	0700063	RESISTOR CARBON FILM 47K OHM +-5% 1/16W	R475	0700048	RESISTOR,CARBON FILM 3.9K OHM +-5% 1/16W
R415	0700063	RESISTOR CARBON FILM 47K OHM +-5% 1/16W	R476	0700048	RESISTOR,CARBON FILM 3.9K OHM +-5% 1/16W
R416	0700063	RESISTOR CARBON FILM 47K OHM +-5% 1/16W	R478	0700034	RESISTOR,CARBON FILM 330 OHM +-5% 1/16W
⚠ R417	01195051	FR 2.2 OHM +-5% 1/4W	R479	0700034	RESISTOR,CARBON FILM 330 OHM +-5% 1/16W
R418	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W	⚠ R480	01195051	FR 2.2 OHM +-5% 1/4W
R419	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W	⚠ R481	01195051	FR 2.2 OHM +-5% 1/4W
R420	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W	R482	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
⚠ R426	01195051	FR 2.2 OHM +-5% 1/4W	R483	0700063	RESISTOR CARBON FILM 47K OHM +-5% 1/16W
R427	0700053	RESISTOR,CARBON FILM 8.2K OHM +-5% 1/16W	R484	0100113	CF 100K OHM +-5% 1/8W
R428	0700053	RESISTOR,CARBON FILM 8.2K OHM +-5% 1/16W	R486	0114161	CF 1K OHM +-5% 1/4W
R429	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W	R487	0114161	CF 1K OHM +-5% 1/4W
R430	0700037	RESISTOR,CARBON FILM 560 OHM +-5% 1/16W	R488	0100077	CF 3.3K OHM +-5% 1/8W
R431	0700053	RESISTOR,CARBON FILM 8.2K OHM +-5% 1/16W	R489	0100077	CF 3.3K OHM +-5% 1/8W
R432	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W	R490	0100133	CF 680K OHM +-5% 1/8W
R433	0700043	RESISTOR,CARBON FILM 1.5K OHM +-5% 1/16W	R491	0100133	CF 680K OHM +-5% 1/8W
R434	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W	R492	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R435	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W	R501	0700061	RESISTOR,CARBON FILM 33K OHM +-5% 1/16W
R436	0700051	RESISTOR,CARBON FILM 5.6K OHM +-5% 1/16W	R502	0700057	RESISTOR,CARBON FILM 18K OHM +-5% 1/16W
R437	0700051	RESISTOR,CARBON FILM 5.6K OHM +-5% 1/16W	R503	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W

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SYMBOL NO.	PART NO.	PART DESCRIPTION
R504	0100049	CF 220 OHM +-5% 1/8W
R505	0100049	CF 220 OHM +-5% 1/8W
R506	0100049	CF 220 OHM +-5% 1/8W
R507	0700031	RESISTOR,CARBON FILM 180 OHM +-5% 1/16W
R508	0700031	RESISTOR,CARBON FILM 180 OHM +-5% 1/16W
R5501	0100038	CF 75 OHM +-5% 1/8W
R5502	0100030M	CF 36OHM +-5% 1/8W
R5503	0100031	CF 39 OHM +-5% 1/8W
R551	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R552	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R553	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R554	0100065	CF 1K OHM +-5% 1/8W
R601	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R602	0700042	RESISTOR,CARBON FILM 1.2K OHM +-5% 1/16W
R604	0100055	CF 390 OHM +-5% 1/8W
R605	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R606	0700059	RESISTOR CARBON FILM 27K OHM +-5% 1/16W
R607	0700055	RESISTOR,CARBON FILM 12K OHM +-5% 1/16W
R608	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W
R609	0700061	RESISTOR,CARBON FILM 33K OHM +-5% 1/16W
R615	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W
R616	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W
R617	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W
R618	0100117	CF 150K OHM +-5% 1/8W
R625	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W
R626	0700059	RESISTOR CARBON FILM 27K OHM +-5% 1/16W
R627	0150160	VR 10K OHM-B +-30%
R628	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W
R629	0119841	MF 0.82 OHM +-5% 1W
R630	0700065	RESISTOR CARBON FILM 68K OHM +-5% 1/16W
R631	0187106	CF 51K OHM +-5% 1/16W
R632	0700065	RESISTOR CARBON FILM 68K OHM +-5% 1/16W
R633	0187076	CF 3K OHM +-5% 1/16W
R634	0700037	RESISTOR,CARBON FILM 560 OHM +-5% 1/16W
R640	0113742	CF 470 OHM +-5% 1/2W
R641	0700035	RESISTOR,CARBON FILM 390 OHM +-5% 1/16W
R650	0700067	RESISTOR,CARBON FILM 100K OHM +-5% 1/16W
R651	0187106	CF 51K OHM +-5% 1/16W
R652	0700064	RESISTOR,CARBON FILM 56K OHM +-5% 1/16W
R654	0700059	RESISTOR CARBON FILM 27K OHM +-5% 1/16W
R655	0700057	RESISTOR,CARBON FILM 18K OHM +-5% 1/16W
R656	0700049	RESISTOR,CARBON FILM 4.7K OHM +-5% 1/16W
R657	0100117	CF 150K OHM +-5% 1/8W
R658	0100127	CF 390K OHM +-5% 1/8W
R660	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R661	0700044	RESISTOR,CARBON FILM 1.8K OHM +-5% 1/16W
R662	0110141	MF 680 OHM +-5% 1W
R663	0700064	RESISTOR,CARBON FILM 56K OHM +-5% 1/16W
R664	0114141	CF 270 OHM +-5% 1/4W
R665	0187104	CF 43K OHM +-5% 1/16W
R666	0700067	RESISTOR,CARBON FILM 100K OHM +-5% 1/16W
R667	0100057	CF 470 OHM +-5% 1/8W
R668	0700048	RESISTOR,CARBON FILM 3.9K OHM +-5% 1/16W
R669	0700052	RESISTOR,CARBON FILM 6.8K OHM +-5% 1/16W
R671	0110125	MF 150 OHM +-5% 1W
R672	0700065	RESISTOR CARBON FILM 68K OHM +-5% 1/16W
R703	0114141	CF 270 OHM +-5% 1/4W
R704	0100125	CF 330K OHM +-5% 1/8W
R705	0700034	RESISTOR,CARBON FILM 330 OHM +-5% 1/16W
R706	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
⚠R707	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R708	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R709	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R711	0100047	CF 180 OHM +-5% 1/8W
R712	0700036	RESISTOR,CARBON FILM 470 OHM +-5% 1/16W
R713	0150287	VR 10K OHM-B
R720	0113739	CF 390 OHM +-5% 1/2W
⚠R722	0100037	CF 68 OHM +-5% 1/8W
R723	0110221	MF 100 OHM +-5% 2W
R726	0113758	CF 2.2K OHM +-5% 1/2W
R727	0114143	CF 330 OHM +-5% 1/4W
⚠R728	01195051	FR 2.2 OHM +-5% 1/4W
⚠R729	01195121	FR 1 OHM +-5% 1/4W
R730	0110119	MF 82 OHM +-5% 1W
R731	0110141	MF 680 OHM +-5% 1W
R732	0113754	CF 1.5K OHM +-5% 1/2W
R733	0100100	CF 30K OHM +-5% 1/8W
⚠R735	0700053	RESISTOR,CARBON FILM 8.2K OHM +-5% 1/16W
⚠R736	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W
R737	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W
R738	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W
R743	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R744	0700018	RESISTOR CARBON FILM 22 OHM +-5% 1/16W
R746	0119508	FR 56 OHM +-5% 1/4W
R747	0700053	RESISTOR,CARBON FILM 8.2K OHM +-5% 1/16W
R748	0119722	MF 1 OHM +-5% 1W
R750	0100073	CF 2.2K OHM +-5% 1/8W
R751	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R752	0150160	VR 10K OHM-B +-30%
R753	0700056	RESISTOR,CARBON FILM 15K OHM +-5% 1/16W
R754	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W
R755	0150157	VR 200K OHM-B RV-6
R757	0700044	RESISTOR,CARBON FILM 1.8K OHM +-5% 1/16W
R758	0700051	RESISTOR,CARBON FILM 5.6K OHM +-5% 1/16W
R759	0700064	RESISTOR,CARBON FILM 56K OHM +-5% 1/16W
R760	0700066	RESISTOR,CARBON FILM 82K OHM +-5% 1/16W
R762	0700058	RESISTOR,CARBON FILM 22K OHM +-5% 1/16W
R763	0110271	MF 12K OHM +-5% 2W
R764	0100087	CF 8.2K OHM +-5% 1/8W
R765	0100091	CF 12K OHM +-5% 1/8W
R766	0700032	RESISTOR,CARBON FILM 220 OHM +-5% 1/16W
R767	0700064	RESISTOR,CARBON FILM 56K OHM +-5% 1/16W
R768	0700059	RESISTOR CARBON FILM 27K OHM +-5% 1/16W
R769	0700056	RESISTOR,CARBON FILM 15K OHM +-5% 1/16W
R770	0114171	CF 2.7K OHM +-5% 1/4W
R771	0700064	RESISTOR,CARBON FILM 56K OHM +-5% 1/16W
R772	0187112	CF 91K OHM +-5% 1/16W
R775	0100077	CF 3.3K OHM +-5% 1/8W
R781	0700065	RESISTOR CARBON FILM 68K OHM +-5% 1/16W
R782	0100133	CF 680K OHM +-5% 1/8W

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SYMBOL NO.	PART NO.	PART DESCRIPTION
R786	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R788	0100033	CF 47 OHM +-5% 1/8W
R789	0700036	RESISTOR,CARBON FILM 470 OHM +-5% 1/16W
⚠R791	0119838	FR 0.5 OHM +-5% 1/4W
R792	0119838	FR 0.5 OHM +-5% 1/4W
R793	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W (FOR 31GX31B)
R801	0700047	RESISTOR,CARBON FILM 3.3K OHM +-5% 1/16W
R802	0100089	CF 10K OHM +-5% 1/8W
R803	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R804	0100089	CF 10K OHM +-5% 1/8W
R805	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W
R806	0150109	VR 200 OHM-B RS-6
R807	0150112	VR 2K OHM-B
R808	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W
R809	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W
R811	0100033	CF 47 OHM +-5% 1/8W
R813	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W
R814	0150112	VR 2K OHM-B
R815	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W
R816	0150109	VR 200 OHM-B RS-6
R817	0700038	RESISTOR,CARBON FILM 680 OHM +-5% 1/16W
R818	0150112	VR 2K OHM-B
R851	0110271	MF 12K OHM +-5% 2W
R852	0110271	MF 12K OHM +-5% 2W
R853	0110271	MF 12K OHM +-5% 2W
R854	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W (FOR 31GX31B)
R855	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W(FOR 31GX31B)
R856	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W(FOR 31GX31B)
R875	0113750	CF 1K OHM +-5% 1/2W
R876	0113750	CF 1K OHM +-5% 1/2W
R877	0113750	CF 1K OHM +-5% 1/2W
R878	0100053	CF 330 OHM +-5% 1/8W
R879	0100053	CF 330 OHM +-5% 1/8W
R880	0100053	CF 330 OHM +-5% 1/8W
R881	0114131	CF 100 OHM +-5% 1/4W
R882	0114131	CF 100 OHM +-5% 1/4W
R883	0114131	CF 100 OHM +-5% 1/4W
R884	0100038	CF 75 OHM +-5% 1/8W
R885	0100038	CF 75 OHM +-5% 1/8W
R886	0100038	CF 75 OHM +-5% 1/8W
R887	0100045	CF 150 OHM +-5% 1/8W (FOR 31DX11/21B/KX39K)
R888	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W
R901	0147813	WW 1.8 OHM +-10% 15W
R902	0110171	MF 12K OHM +-5% 1W
R903	0100111	CF 82K OHM +-5% 1/8W
⚠R904	0119508	FR 56 OHM +-5% 1/4W
R905A	0110197	MF 10 OHM +-5% 2W
R905B	0110197	MF 10 OHM +-5% 2W
R905C	0110197	MF 10 OHM +-5% 2W
R906	0141161	WW 220 OHM +-5% 15W
R921	0100001	CF 2.2 OHM +-5% 1/8W
R922	0700024	RESISTOR,CARBON FILM 56 OHM +-5% 1/16W
R927	0100061	CF 680 OHM +-5% 1/8W
R928	0113729	CF 150 OHM +-5% 1/2W
R928A	0100029	CF 33 OHM +-5% 1/8W
R929	0114167	CF 1.8K OHM +-5% 1/4W
R930	0100033	CF 47 OHM +-5% 1/8W
⚠R932	0700054	RESISTOR,CARBON FILM 10K OHM +-5% 1/16W
R933	0700044	RESISTOR,CARBON FILM 1.8K OHM +-5% 1/16W
R934	0119691	MG 0.33OHM +-5% 1W
⚠R936	0700045	RESISTOR,CARBON FILM 2.2K OHM +-5% 1/16W
R937	0700041	RESISTOR,CARBON FILM 1K OHM +-5% 1/16W
R950	0700067	RESISTOR,CARBON FILM 100K OHM +-5% 1/16W
R950A	0100133	CF 680K OHM +-5% 1/8W
R950B	0100133	CF 680K OHM +-5% 1/8W
R952	0100065	CF 1K OHM +-5% 1/8W
R953	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W
R954	0100065	CF 1K OHM +-5% 1/8W
R955	0700027	RESISTOR,CARBON FILM 100 OHM +-5% 1/16W
R956	0700061	RESISTOR,CARBON FILM 33K OHM +-5% 1/16W
R957	0700064	RESISTOR,CARBON FILM 56K OHM +-5% 1/16W
R958	0700053	RESISTOR,CARBON FILM 8.2K OHM +-5% 1/16W
R959	0110121	MF 100 OHM +-5% 1W
R960	0113737	CF 330 OHM +-5% 1/2W
R961	0110137	MF 470 OHM +-5% 1W
R962	0147060	WW 33 OHM +-5% 2W
R981	0110125	MF 150 OHM +-5% 1W
R982	0110125	MF 150 OHM +-5% 1W
R983	0141161	WW 220 OHM +-5% 15W
R983A	0110155	MF 2.7K OHM +-5% 1W
R983B	0110347	MF 1.2K OHM +-5% 3W
R983C	0110347	MF 1.2K OHM +-5% 3W
R984	0110261	MF 4.7K OHM +-5% 2W

ICs

IC0101	2001872	IC LC864032A-5414
⚠IC0102	2381111	IC M6M80021L
IC0103	2917391	IC MSC11371RS
IC0104	2004952	IC LA7945N
IC0401	2004592	IC AN5817K
IC201	2004133	IC LA7674
IC3001	2020341	IC MM1111XS
IC3002	2003981	IC BA7604N (LINEAR)
IC401	2004362	IC CXA1279AS
IC402	2363191	IC HD14066BP
⚠IC471	2004341	IC AN7178 (LINER)
⚠IC625	2003541	IC LA7838 (LINEAR)
IC651	2362605	IC BA4558
⚠IC701	2000521	IC PC713F6 (LINEAR)
⚠IC702	2000465	IC PS2501-1 (KD/LD) (PHOTO COUPLER)
⚠IC901	2912177	IC STR30130

TRANSISTORS

Q0101	2320596	TR 2SC458C/D	SI 230MHZ 200MW
Q0102	2320637	TR 2SA673C/D	SI 80MHZ 400MW
Q0105	2320596	TR 2SC458C/D	SI 230MHZ 200MW
Q0106	2320596	TR 2SC458C/D	SI 230MHZ 200MW
Q0107	2320596	TR 2SC458C/D	SI 230MHZ 200MW

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SYMBOL NO.	PART NO.	PART DESCRIPTION
Q0108	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q0109	2320643	TR 2SC1213C SI 80MHZ 400MW
Q0110	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q0111	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q101	2320144	TR 2SC1906
Q201	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q202	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q241	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q301	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q302	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q303	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q3101	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q3102	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q3103	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q3104	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q3105	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q3106	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q3107	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q3108	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q3109	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q3110	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q3111	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q3112	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q3113	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q3114	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q3115	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q401	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q402	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q403	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q404	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q405	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q406	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q407	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q408	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q409	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q410	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q411	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q412	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q471	2320643	TR 2SC1213C SI 80MHZ 400MW
Q551	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q601	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q602	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q651	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q706	2315411	TRANSISTOR 2SD2012
Q710	2323523	TRANSISTOR 2SD789 (D)
⚠Q711	2315272	TRANSISTOR 2SC4589-03
⚠Q712	2320643	TR 2SC1213C SI 80MHZ 400MW
Q741	2323526	TRANSISTOR 2SD789 D/E
Q750	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q751	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q752	2323431	TR 2SC1983 SI
Q851	2320591	TR 2SC458B/C SI 230MHZ 200MW
Q852	2320591	TR 2SC458B/C SI 230MHZ 200MW
Q853	2320591	TR 2SC458B/C SI 230MHZ 200MW
Q854	2315491	TRANSISTOR 2SC4544
Q855	2315491	TRANSISTOR 2SC4544
Q856	2315491	TRANSISTOR 2SC4544
Q863	2320591	TR 2SC458B/C SI 230MHZ 200MW
Q864	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q904	2320643	TR 2SC1213C SI 80MHZ 400MW
⚠Q906	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q921	2327501	TR 2SD1876
Q951	2323526	TRANSISTOR 2SD789 D/E
Q952	2320643	TR 2SC1213C SI 80MHZ 400MW
Q953	2320681	TR 2SA673A B/C SI 80MHZ 400MW
Q954	2320663	TR 2SC1213AC SI 80MHZ 400MW
Q981	2326216	TR 2SC3116 S/T
Q982	2327883	TR 2SA1207
		DIODES
D0104	23383211	DI 1SS270
D0107	23383211	DI 1SS270
D0108	23383211	DI 1SS270 (FOR 31DX21/GX31B/KX39K)
D0110	23383211	DI 1SS270
D0113	23383211	DI 1SS270
D0114	23383211	DI 1SS270
D0115	23383211	DI 1SS270
D0116	23383211	DI 1SS270
D0117	23383211	DI 1SS270
D0118	23383211	DI 1SS270
D0119	23383211	DI 1SS270
D0121	23383211	DI 1SS270
D0124	23383211	DI 1SS270
D0125	23383211	DI 1SS270
D0126	23383211	DI 1SS270
D0127	23383211	DI 1SS270
D0128	23383211	DI 1SS270
D301	23383211	DI 1SS270
D302	23383211	DI 1SS270
D303	23383211	DI 1SS270
D471	23383211	DI 1SS270
D472	23383211	DI 1SS270
D473	23383211	DI 1SS270
D474	23383211	DI 1SS270
D601	23383211	DI 1SS270
D626	23394911	DI AM01Z
D628	23383211	DI 1SS270
D629	23383211	DI 1SS270
D630	23383211	DI 1SS270
D702	23383211	DI 1SS270
D703	23383211	DI 1SS270
⚠D710	2346511	DIODE RS3FS
⚠D711	2336612	DI RU3AM
D712	2338902	DI DFM1SA4
⚠D713	23394811	DI AS01Z
D721	23394811	DI AS01Z
D741	23383211	DI 1SS270
D742	23394911	DI AM01Z
D751	23383211	DI 1SS270

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SYMBOL NO.	PART NO.	PART DESCRIPTION
D752	23383211	DI 1SS270
D753	23383211	DI 1SS270
D754	23383211	DI 1SS270
D755	23383211	DI 1SS270
D756	23383211	DI 1SS270
D791	2338451	DI EU02Z
D792	2338902	DI DFM1SA4
D804	23383211	DI 1SS270
D805	23383211	DI 1SS270
D806	23383211	DI 1SS270
D807	23383211	DI 1SS270
D808	23383211	DI 1SS270
D872	23383211	DI 1SS270
⚠D901	2342062	DIODE D3SBA60-4103
D910	23394911	DI AM01Z
D911	2338902	DI DFM1SA4
D915	23394911	DI AM01Z
D921	2336612	DI RU3AM
D922	23383211	DI 1SS270
D951	23394911	DI AM01Z
D952	23394911	DI AM01Z
D953	23394911	DI AM01Z
D954	23394911	DI AM01Z
ZD0101	2339833M	DIODE-ZENER HZS5A3
ZD101	2339972M	DIODE-ZENER HZS33-2
ZD3001	2339889	ZD HZS12C3
ZD3002	2339889	ZD HZS12C3
ZD301	2339889	ZD HZS12C3
ZD3051	2339889	ZD HZS12C3 (FOR 31DX21/GX31B)
ZD3052	2339889	ZD HZS12C3 (FOR 31DX21/GX31B)
ZD3053	2339889	ZD HZS12C3 (FOR 31DX21/GX31B)
ZD401	2339812M	DIODE-ZENER HZS3A2
ZD402	2339812M	DIODE-ZENER HZS3A2
ZD501	2339868M	ZD HZS9C2
ZD502	2339868M	ZD HZS9C2
ZD503	2339868M	ZD HZS9C2
ZD620	2339921M	DIODE-ZENER HZS20-1
ZD621	2339872M	DIODE-ZENER HZS11A2
ZD622	2339862M	ZD HZS9A2
ZD702	2339889	ZD HZS12C3
⚠ZD712	2339232	ZD HZS30-2L
⚠ZD713	2339241	DI HZS331L
ZD741	2339851	DIODE-ZENER HZS7A1
ZD751	2339981	DIODE-ZENER HZS36-1
ZD781	2339835M	ZD HZS5B2TA
ZD783	2339872M	DIODE-ZENER HZS11A2
ZD784	2339837	ZD HZS-5C1
ZD785A	2339091M	ZD HZS9C1L TA
ZD785B	2339844	ZD HZS6B1
ZD804	2339887	DIODE-ZENER HZS12C1
ZD805	2339887	DIODE-ZENER HZS12C1
ZD806	2339887	DIODE-ZENER HZS12C1
ZD851	2339801	ZD HZS2B1
ZD852	2339801	ZD HZS2B1
ZD853	2339801	ZD HZS2B1
ZD861	2331781	ZD HZ4 (A1)
ZD907	2339886M	DIODE-ZENER HZS12B3
ZD951	2339867	DIODE-ZENER HZS9C1
ZD952	2339844	ZD HZS6B1
ZD953	2339848	ZD HZS-6-C2
ZD954	2339848	ZD HZS-6-C2
		TRANSFORMERS
T201	2145961	IF COIL
⚠T701	2260163	HORIZONTAL DRIVE TRANSFORMER
⚠T702	2436772	FLYBACK TRANSFORMER C87LLI (HHEA MD) (HSCC MD)
⚠T921	2216141	POWER TRANSFORMER
⚠T951	2215911	POWER TRANSFORMER
		FUSE
⚠F901	2721053	UL FUSE 5A
		COMPOUND COMPONENTS
CP201	2300477	SAW FILTER HW2267
CP202	2167201	CERAMIC TRAP 4.5MHZ
CP241	2167311	CERAMIC FILTER 4.5MHZ
CP3101	2151041	DELAY LINE AND B.P.F
⚠CP901	2793313	COMPOUND COMPONENT
MF701	2167241	CERAMIC OSC 0.5MHZ
		COILS
L0101	2146091	COIL-OSC
L0102	2122942	LA AXIAL COIL 8.2 MICRO H +-10%
L0103	2122942	LA AXIAL COIL 8.2 MICRO H +-10%
L0104	2122942	LA AXIAL COIL 8.2 MICRO H +-10%
L0105	2122942	LA AXIAL COIL 8.2 MICRO H +-10%
L0108	2122253	LA AXIAL COIL 100 MICRO H
L0109	2122253	LA AXIAL COIL 100 MICRO H
L101	2122253	LA AXIAL COIL 100 MICRO H
L102	2122253	LA AXIAL COIL 100 MICRO H
L103	2122927	LA AXIAL COIL 0.68 MICRO H
L201	2122253	LA AXIAL COIL 100 MICRO H
L202	2145971	IF COIL
L203	2142445	CARRIER FILTER AFS COIL
L204	2122944	LA AXIAL COIL 12 MICRO H
L205	2122952	LAL AXALCOIL
L241	2122948	LA AXIAL COIL 27 MICRO H +-10%
L243	2145981	DISCRIMINATOR COIL
L3001	2122253	LA AXIAL COIL 100 MICRO H
L3002	2122253	LA AXIAL COIL 100 MICRO H
L301	2122947	LA AXIAL COIL 22 MICRO H +-10%
L302	2122927	LA AXIAL COIL 0.68 MICRO H
L3051	2120482	FILTER COIL 100 MICRO H +-10%(FOR 31DX21/GX31B/KX39K)
L3052	2122253	LA AXIAL COIL 100 MICRO H (FOR 31DX21/GX31BKX39K
L3101	2122253	LA AXIAL COIL 100 MICRO H
L3103	2141148	1H DL COIL

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SYMBOL NO.	PART NO.	PART DESCRIPTION
L3104	2122939	LA AXIAL COIL 5.6 MICRO H
L3105	2122951	LA AXIAL COIL 39 MICRO H +-10%
L3106	2122947	LA AXIAL COIL 22 MICRO H +-10% (FOR 31GX31B)
L401	2122652	FERRITE CORE
L501	2122253	LA AXIAL COIL 100 MICRO H
L551	2122253	LA AXIAL COIL 100 MICRO H
L601	2122956	LA AXIAL COIL 100 MICRO H +-10%
L702	2122938	LA AXIAL COIL 4.7 MICRO H
L710	2124513	LINEARITY COIL
⚠L711	2275381	CHOKING COIL
L712	2122253	LA AXIAL COIL 100 MICRO H
L713	2122094	FIXED COIL
L714	2122653	FERRITE BEADS CORE
L741	2122253	LA AXIAL COIL 100 MICRO H
L850	2120482	FILTER COIL 100 MICRO H +-10%
L851	2122945	LA AXIAL COIL 15 MICRO H +-10%
L852	2122945	LA AXIAL COIL 15 MICRO H +-10%
L853	2122945	LA AXIAL COIL 15 MICRO H +-10%
L854	2122956	LA AXIAL COIL 100 MICRO H +-10%
L855	2122956	LA AXIAL COIL 100 MICRO H +-10%
L856	2122956	LA AXIAL COIL 100 MICRO H +-10%
L861	2122653	FERRITE BEADS CORE
⚠L901	2272293	LINE FILTER LL (T)
L905	2229022	DEGAUSSING COIL (HHEA MD) (HSCC MD)
L920	2122653	FERRITE BEADS CORE
		SWITCH
S0101	2633171	5 KEY TACT SWITCH 5P
S0102	2632923	TACT SWITCH
		COLOR PICTURE TUBE
⚠V1	2471261	COLOR PICTURE TUBE M78JUA29X01 (HHEA MD) (HSCC MD) (FOR 31DX11B)
⚠V1	2471261	COLOR PICTURE TUBE M78JUA29X01 (HHEA MD) (HSCC MD)
		COLOR PICTURE TUBE A79AEJ10X01(HHEA MD) (HSCC MD) (FOR 31DX21B/31KX39K)
⚠ V1	2471571	COLOR PICTURE TUBE A79AFX15X01 (HHEA MD) (HSCC MD) (FOR 31GX31B)
		MISCELLANEOUS
⚠E902	3772201	AC CORD HOLDER
⚠RL901	2641221	POWER RELAY
TH651	2340371	THERMISTOR 112301-9
⚠TH901	2341281	THERMISTOR PTH451C460BG3R0Q
FB701	2122653	FERRITE BEADS CORE
FB701A	2122653	FERRITE BEADS CORE
FB702	2771893	FERRITE BEADS CORE
DL3101	2794401	DELAY LINE
DL3102	2793281	DELAY LINE
SG851	2340037	SPARK GAP
⚠SG901	2340741	SPARK GAP
⚠SP451	2412647	SPEAKER (HHEA MD) (HSCC MD)
⚠SP452	2412647	SPEAKER (HHEA MD) (HSCC MD)

SYMBOL NO.	PART NO.	PART DESCRIPTION
#010	3105303	FRAME ASS'Y (HHEA MD) (HSCC MD)(FOR 31GX31B)
#011	3105304	FRAME ASS'Y (HHEA MD) (HSCC MD)(FOR 31DX21B)
#012	3105304	FRAME ASS'Y (HHEA MD) (HSCC MD)(FOR 31DX11B)
#105	3872878	ANTENNA TERMINAL BOARD (HHEA MD) (HSCC MD)
#11	3552525	CARTON BOX (HHEA MD)(FOR 31DX21/GX31B)
#160	3739671	CORD HOLDER
#202	4519503	3X12 TAPPING SCREW
#203	4519503	3X12 TAPPING SCREW
#21	3620361	TOP CUSHION (HHEA MD)(FOR 31DX21/GX31B)
#210	4159427	3X10 TAPPING SCREW WITH WASHER
#22	3620371	BOTTOM CUSHION (HHEA MD)(FOR 31DX21/GX31B)
#225	3875771	LATCH
#250	4520232	4X16 DT SCREW
#251	4520232	4X16 DT SCREW (FOR 31DX21/GX31B/KX39K)
#309	3204181	R/C LENS (HHEA MD) (HSCC MD)
#410	8781642	4X12 TAPPING SCREW
#500	3164183	BACK COVER ASS'Y (HHEA MD)
#601	3727972	HOLDER-AC LINE CORD
#860	4520771	4X18 TAPPING SCREW WITH WASHER
#895	8781646	4X16 TAPPING SCREW
#898	8781646	4X16 TAPPING SCREW(FOR 31DX11/GX31B)
#900	8781642	4X12 TAPPING SCREW
#906	4963533	ANTENNA TERMINAL LABEL (HHEA MD) (HSCC MD)
#951	4159411	3X8 KNURL TAPPING SCREW
#970	8815126	LOCKING WASHER 4
A013	3404743	PWB ASS'Y MAIN CHASSIS (HHEA MD) (HSCC MD) (31GX31B)
A014	3404744	PWB ASS'Y MAIN CHASSIS (HHEA MD) (HSCC MD)(0X21/KX39)
A016	3404746	PWB ASS'Y MAIN CHASSIS (HHEA MD) (HSCC MD)(31DX11B)
A022	2892373	PWB ASS'Y CPT (HHEA MD) (HSCC MD)(FOR31DX11/21B/KX39K)
A024	2892374	PWB ASS'Y CPT (HHEA MD) (HSCC MD)(FOR 31GX31B)
⚠EF901	2720221	FUSE HOLDER
⚠EM	2665272	4P PLUG PIN WITH BASE
ESR	2902263	4P SUB MINI PLUG PIN
EW	2661753	PIN PLUG WITH BASE
⚠ E3001	2983099	5P PIN JACK
⚠E3002	2673602	3P PIN JACK
E301	2573922	REMOTE CONTROL TRANSMITTER CLU-692GR (HHEA MD) (HS
E5501	2983122	S-SOCKET (HHEA MD) (HSCC MD)
E602	2994511	CPT EARTH READ
E603A	2771461	MAGNET PEACE
E851	2953344	CPT SOCKET
⚠E901	2972521	POWER CORD
E903	2787531	MICA PLATE
JPA	2976661	12P SUB MINI CONNECTOR (HHEA MD) (HSCC MD) (X21/X31/X39)
JPB	2954962	5P MICRO CONNECTOR (FOR 31DX21/GX31B/KX39K)
NC901	2784342	CONDENSER COVER
NQ706A	4520881	M3X8 SCREW WITH WASHER
NT703A	8821114	NUT 3 (FOR 31GX31B)
NT704	4243445	G51 INSULATOR
NT705	4518742	M2.3X12 SCREW WITH WASHER (FOR 31DX11/21BKX39K)
NT705A	8711412	3X12 PAN HEAD SCREW (FOR 31GX31B)
N106	3737101	PURSE LOCK 15 (FOR 31DX11/GX31B)
N106A	3737101	PURSE LOCK 15 (FOR 31DX21BKX39K)
N108	2788841	ANODE CLAMP

PRODUCT SAFETY NOTE: **Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.**

SYMBOL NO.	PART NO.	PART DESCRIPTION
N109	3763751	SK BINDER (FOR 31DX11/21B)
N201	3763751	SK BINDER
N201	4880901	INSTRUCTION MANUAL (HHEA MD)
N471A	4520881	M3X8 SCREW WITH WASHER
N471B	8821234	3 NUT
N606	3330941	EARTH SPRING
N610A	2772981	FERRITE SHEET
N611	3763751	SK BINDER
N612	3763752	SK BINDER
N625A	4520881	M3X8 SCREW WITH WASHER
N625B	8821234	3 NUT
N711B	8821234	3 NUT
N711C	8813124	WASHER
N711E	4159411	3X8 KNURL TAPPING SCREW
N752A	4520881	M3X8 SCREW WITH WASHER
N801	8815126	LOCKING WASHER 4
N901A	4520883	M3X12 SCREW WITH WASHER
N901B	8781642	4X12 TAPPING SCREW
N901C	4137974	4X12 TAPPING SCREW WITH WASHER
PY1	2902266	7P SUB MINI PLUG PIN
PY2	2902263	4P SUB MINI PLUG PIN
⚠U0102	2381126	REMOTE CONTROL RECEIVER SPS-409-1F
U0501	2575453	P IN P UNIT (HHEA MD) (HSCC MD) (31DX21/GX31B/KX39K)
⚠U101	2428681	TUNER ET-352A (HHEA MD) (HSCC MD)
X0101	2168831	CRYSTAL
X501	2791505	CRYSTAL
		31KX39K CABINET ASSEMBLY
#	3123462	31KX39K CABINET ASSEMBLY
#011	H512052	CABINET 31KX39K
#020	H420211	SWIVEL (712 FLAT 47 TOP PLATE)
#022	H920181	VELCRO
#024	H920182	VELCRO
#026	H420201	INSERT NUT
#028	H820062	1/4-20X1 SCREW
#030	H830011	SAE 1/4 PLAIN WASHER
#032	H840011	GLIDE PIN
#105	3106801	31KX39K FRONT FRAME ASSEMBLY
#111	3820678	DOOR
#112	3820675	DOOR 3195 PMMA
#114	3785043	D40 PUSHLOCK A PC
#116	3825763	INDOOR PLATE 3195 PVC
#118	3209161	R/C PANEL ASSEMBLY 3190 PMMA
#118A	3209061	R/C PANEL 3190
#118B	3826141	LED LENS 3190
#119	3209162	R/C PANEL ASSEMBLY 31KX
#119A	3209062	R/C PANEL 31KX39K
#119B	3826142	LED LENS 31KX39K
#120	3209101	FRONT PANEL 3196 (R) PMMA
#122	3209102	FRONT PANEL 3196 (L) PMMA
#124	3487251	HITACHI BADGE 7.5 PS
#126	9449507	NITTO TAPE NO.5 W9 (BLACK)
#128	3103042	FRONT FRAME 3195
#128	3103043	FRONT FRAME 31KX39K PS

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